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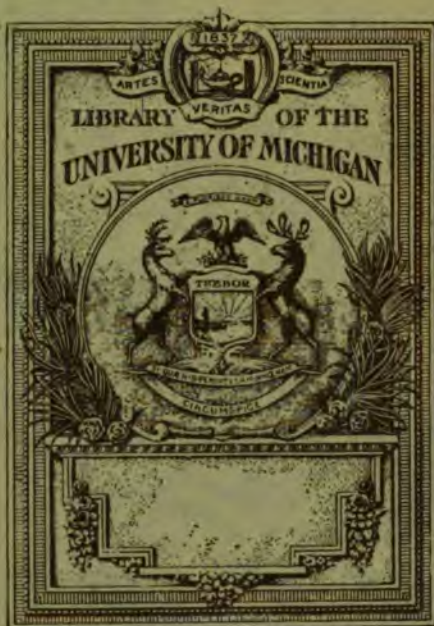
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CHAPTER I.

EVOLUTION OF THE PLAN.

The first railway to the Pacific claimed the attention of the country on two distinct bases—as an element in our political history, and as a commercial enterprise. In the early sixties the leading argument in favor of building it was the necessity of strengthening in their allegiance to the Union the states on the Pacific coast. Since the completion of the road in 1869 the commercial importance has been the obvious one.

It was, moreover, the commercial features of the scheme, and only in a minor way the political ones, that inspired the early agitation for a road. In this agitation, which stretches far back of the Civil War, it is interesting to trace the evolution of the plan for connecting the two oceans by rail, and to see how the road was considered at first desirable, then important, and at last necessary.

The spirit of unrest which led to the discovery of new lands and new routes to old ones during the fifteenth and sixteenth centuries was slow to die out. The commercial spirit of Europe which inspired the quest for a new sea route to India did not subside with the finding of an intervening continent and the subsequent failure to find a Northwest Passage. If there was no waterway, a land route was demanded. Explorers had not been slow to trace the great natural waterway leading into the heart of the continent furnished by the Great Lakes, but advances west of Lake Superior were inconsiderable. Thus far the French had led; here they stopped.

The completion of the task was reserved for Anglo-Saxon genius. The first attempt to find a way across the continent westward from the lakes was made in 1763 by Captain Jonathan

Carver,¹ of the British provincial army, but this was prompted rather by the spirit of the explorer than by the commercial spirit. During the early years of this century, however, there was a genuine attempt toward opening a road—the Lewis and Clarke expedition.² This was one of President Jefferson's plans, and he drafted with his own hand the instructions for its leaders.

Roadmaking began a new era when, in 1829, Stephenson made the locomotive a success. The next year saw the introduction of the railway into America, and two years later there was published an article proposing a railway to the Pacific.³ The idea spread rapidly, and in 1836 there was held the first public meeting to consider the project.⁴ From 1842 on, John C. Fremont did much valuable work in preparing the public mind for the future Pacific railway by the accounts which he published of his extensive travels in the western country, thus correcting many popular misconceptions concerning that region.

Asa Whitney was, between 1840 and 1850, the most zealous, efficient, and important advocate of the Pacific railway project.

¹ Probably the first man to make extensive explorations in the Northwest in the interest of England was Carver. He was a native of Connecticut and an officer in the French wars until 1763. He spent two years and five months in explorations, but failed to effect what he had planned—an overland trip to the Pacific. In 1767 he was at Prairie du Chien, Wisconsin; he spent a winter "among the Naudousee of the plains, on the river St. Pierre [probably this was in the present state of Minnesota, on the St. Paul River], 1400 miles west of Michillimackinac;" in October, 1768, he was back at Boston, after having traveled over 7000 miles, whence he went to England to publish the results of his investigations. His petition to the king did not result in even the repayment of his expenses; he was defrauded of the proceeds of the sale of his book of travels; and, in 1780, he died destitute, at London, aged 48. See Allen's *American Biographical Dictionary*.

² Lewis and Clarke, setting out late in 1803 with 28 men, ascended the Missouri; in 1805 they reached the Columbia and descended to its mouth; and after spending the winter on the Columbia returned, reaching the Mississippi again in September, 1806. Their route coincided roughly with that of the Northern Pacific Railroad. See Chapter iii of Smalley's *History of the Northern Pacific Railroad*, in which there is reference to a complete account of the journey, prepared from the journals of the leaders. Paul Allen edited it and Jefferson prefixed a memoir. The last American edition was published in New York in 1843.

³ In *The Emigrant*, of Ann Arbor, Michigan, for February 6, 1832.

⁴ This was called by John Plumbe, a civil engineer, at Dubuque, Iowa.

Mr. Whitney was a New York merchant in the China trade who had gained a considerable knowledge of the geography of the West and also of its needs and its possibilities. By incessant lecturing and writing, and by personal contact with leading men, he made his influence very widely felt, and impressed upon a vast number of people his views of the need and the feasibility of a Pacific railway. He has the honor also of having formulated the first definite plan for a road. Although this never received the sanction of Congress it is important as indicating the first stage in the evolution of the Pacific Railway Act.

Whitney's plan, although it varied somewhat in details at different dates, may be stated as it is found in his third "Memorial to the Senate and House of Representatives of the United States in Congress assembled." He here proposed to build a line of railway, beginning at Lake Michigan, westward to the Pacific. He says:

"Your memorialist would now represent and explain the plan by which he proposes to carry out this great work. He prays that your honorable body will be pleased to set apart, and sell to him, sixty miles wide of the public lands (and an equivalent for any which may have been taken up) from Lake Michigan to the Pacific Ocean, for this especial purpose. He has explored and examined a part of the route; and from the lake onward, for 800 miles, the land is of the very best quality, but nearly 500 miles of this 800 without timber, and then no timber on to the Rocky mountains.

"That, after this 800 miles, onward nearly to the ocean, the land is represented as very poor—too poor to sustain settlement. Therefore, the whole work is based upon the 800 miles of the first part, with the belief that the facilities which the road would create and give to settlement, intercourse, and com-

* The first was presented in 1845, and the result was the introduction, July 31, 1846, by Senator Breeze, of the Committee on Public Lands, of a bill to give effect to Whitney's ideas. See *Congressional Globe*, Twenty-ninth Congress, first session, p. 1171. The second was presented in 1846. The third is dated Washington, March 17, 1848. All three are given as appendices to No. 140 of the *Reports of Committees of the House of Representatives*, Thirty-first Congress, first session.

munication with the markets, would render a part of the poor land useful and available.

"Your memorialist does not ask your honorable body for the appropriation of one dollar in money, or even for a survey of the route. He proposes to make the surveys, commence the work, with machinery, preparations, and arrangements for its continuance, and complete ten miles of road, at his own expense; and when the ten miles is completed to the satisfaction of a commissioner (appointed as your honorable body shall direct), and with his satisfaction that the work will be continued, then your memorialist would receive five miles, or one-half of the lands on the line of the ten miles of road completed, with which to reimburse himself; the other five miles, or half of the lands, to be held by the government; and so on for each and every ten miles for the 800 miles of good land, or so far as the one-half of the land set apart will furnish means to complete ten miles of road. Thus the road would be completed for the 800 or more miles, and in operation, with one-half (the alternate five miles) settled with towns, villages, and cities, while the other half (or alternates) held by the government would be enhanced in value more than fourfold what *all* is now worth, and held or sold as the demand for actual settlement may require, but, when sold, to be sold as Congress shall direct, and the proceeds held as a fund to continue and complete the road through the poor lands all to the ocean; and the road and machinery also held by the government as further security that the work will be continued and completed. Beyond the 800 miles of good lands, and through the poor lands, when each and every ten miles of road shall have been completed, and the entire ten miles by sixty of lands do not furnish means to reimburse for the actual outlay, then the fund which may have been accumulated from the reserved half of good lands, or the lands, shall be applied to this purpose; but, in all cases, the ten miles of road must be completed to the satisfaction of the commissioner, before any lands, or money from land sold, can be touched by your memorialist and associates.

"When the road is so far advanced that security can be given to the government that it will be completed, then your memorialist shall pay to the government 16 cents per acre for all the lands set apart of this work; but the balance, with the fund from the half of the good lands, if any, after the road is completed, shall be held subject to keep the road in repair and operation while it may be considered as an experiment, and until by its earnings it can provide for itself; then the surplus lands, and funds, if any, with the road and machinery, shall belong to and be the property of your memorialist and his heirs and assigns; but leaving with Congress, if necessary, the power of prescribing the mode of sale for any lands at public auction to the highest bidder, and leaving with Congress the power of fixing and regulating the tolls of said road forever after, sufficient only for repairs, operation, and necessary expenses; with power also to fix and regulate the transportation of United States mails, troops, and munitions of war, etc., belonging to the government—thus making it a national road, still built and carried on purely as an individual enterprise, without any government, political, or party machinery or influence."¹

Mr. Whitney went on to estimate the length of the road at 2030 miles, for which the grant of land would be nominally 77,952,000 acres, but practically about two-fifths of that amount, granting that only the first 800 miles of the road would run through valuable lands. From the sale of these lands Whitney believed that he would be able to obtain the sum necessary for the accomplishment of his task, and he estimated the necessary expense at \$60,600,000 for the completed road.²

The fanatical nature of the man is evident when Whitney says: "My desire and object have been to carry out and accomplish this great work for the motives, as here and everywhere else by me declared, to give my country this great thoroughfare for all nations without the cost of one dollar; to give employment to and make comfortable and happy millions who are now desti-

¹ Third memorial referred to above, pp. 37 and 38.

² *Ibid.*, p. 38.

tute and starving, and to bring all the world together in free intercourse as one nation. If it is feared that the remuneration will be disproportionate to the extent and importance of the work, then I am ready to relinquish any claim I may have for compensation, and let the people give me anything or nothing, as they please. If they will but allow me to be their instrument to accomplish this great work, it is enough. I ask no more. I am willing to have my acts scanned; but I feel that I ought not to be doubted when I say that what I have done, and what I propose to do, is not for the gain of wealth, or power, or influence, but for the great good which I am persuaded it must produce to our whole country. I have undertaken this mighty work, because I know that someone's whole life must be sacrificed to it."¹

When Whitney presented to Congress his third memorial, his plan had been formally approved by public gatherings and boards of trade in a great number of widely scattered cities, and also by the legislatures of 16 states. The distribution of the approving states shows the total lack at this time of sectional feeling in the treatment of the project. Of the New England states the list contains five—Maine, New Hampshire, Vermont, Rhode Island, and Connecticut; of the middle states three—New York, New Jersey, and Pennsylvania; of the southern states five—Kentucky, Tennessee, Maryland, Georgia, and Alabama; and of the central states three—Ohio, Michigan, and Indiana.² As the Union at this time consisted of but thirty states, a majority of them had sanctioned the plan. These 16 states, moreover, contained 65 per cent. of the population of the Union.

¹ Pamphlet issued in 1849.

² As appendices to Report No. 140, referred to in note p. 3, there are given the resolutions passed by 14 of these legislatures. Accompanying the list of states passing such resolutions is this statement: "In most instances, the resolutions of the above state legislatures passed both houses by an unanimous vote, and in all cases by large majorities—more than two-thirds" (p. 21). The states specified are as in the text. In the memorial quoted above Mr. Whitney says that 17 had approved his plan (p. 43). In a letter written at Washington, February 24, 1849, he says 19 have done so. The *Democratic Review*, vol. xxiii, p. 405, gives the list in the exact order of the Committee's Report, but makes two important insertions—Illinois and Iowa. Includ-

Thus accredited Whitney brought his scheme before Congress. In the House of Representatives his memorial was referred to the Committee on Roads and Canals, by whom a report was submitted March 13, 1850. This highly commended Whitney's plan and mapped out the arguments in favor of a Pacific railway as follows: (1) It will cement the commercial, social, and political relations of the East and the West. (2) It will be a highway over which will pass the commerce of Europe and Asia, to the great advantage of our country.¹ (3) It will tend to secure the peace of the world. (4) It will transfer to the United States part of the commercial importance now held by Great Britain.

The committee proceeded to state why they preferred Whitney's plan to any of the others which were being talked of in an indefinite way. Their reasons were given thus: (1) This is a private enterprise, in which the government is in no way entangled. (2) This route has fertile land and timber in greater quantities than any of the more southerly ones. (3) The rivers are more easily bridged at the north. (4) Owing to the dryness of the atmosphere the snow-fall is less than on the other routes. (5) The northern passes are at lower altitudes. (6) Animal and vegetable products which would be ruined by carriage through a warmer region can here be transported without danger. (7) The higher the latitude the shorter the distance to be traversed. (8) This plan creates the means for carrying itself out. (9) No other plan proposes to lower the price of transportation to its cost.

Accompanying this report the committee presented a bill putting into proper legal form Whitney's proposal as given above, except that the price per acre was made 10 cents instead of 16 cents.

ing these in the list Whitney's plan was approved by the legislatures representing 70 per cent. of the people of the United States.

¹ There was a great deal of speculation as to the amount of freight passing between Europe and Asia which would take this route, and the belief seems to have been very general that it would be considerable. All these calculations were upset by the opening of the Suez Canal, which occurred about six months after the completion of the railway.

In the Senate, Bright, of the Committee on Roads and Canals, presented on the 12th of September, 1850, an elaborate report and a bill providing for the grant to Whitney.¹ Neither of these bills ever came to a vote.

Even before this time men prominent in the political world had begun to lend prestige to the Pacific railway scheme by their advocacy of it. Calhoun had become interested in it;² Jefferson Davis, with an eye to the advantages of the South, had spoken strongly in its favor;³ Stephen A. Douglas showed a marked desire that the project succeed.

Salmon P. Chase has claimed to be the author of the first measure under which the government did any real work toward securing a road to the Pacific—an appropriation, in 1853, of funds for the exploration of possible routes for the road.⁴ During no session

¹ *Congressional Globe*, Thirty-first Congress, first session, p. 1809.

² See his reports while Secretary of War, and a letter reproduced in *Hunt's Magazine*, vol. xviii, p. 593.

³ At the time of the Thirtieth Congress he had "declared himself in favor of building a railroad 'from the Mississippi to the western limit of the territorial possessions of the United States, from one sea to another.' 'It is not,' added the future leader of disunion, 'that I have any want of confidence in the attachment of any American citizen to the government of the United States; for I have an abiding confidence in that attachment. I believe it is not to be broken off, however widely they may be separated from the government.'"—*Galaxy*, vol. iv. p. 486.

⁴ "It is among my most pleasing recollections of service as a Senator from Ohio, that the first practical measure looking to the construction of a Pacific railroad, which received the sanction of Congress, was moved by me. That measure was an amendment to the army appropriation bill, placing at the disposal of the Secretary of War one hundred and fifty thousand dollars, to be expended in surveys and explorations of routes for the road. It was adopted in the Senate in February, 1853, and was subsequently concurred in by the House. Its results are embodied in the volumes known as the *Pacific Railroad Reports*, printed by order of Congress."

From a letter of Mr. Chase's to General John A. Dix, dated Washington, November 25, 1863, and reprinted on pages 158 and 159 of J. W. Schuckers's *Life of Chase*. The Act referred to will be found in 10 *Statutes at Large*, 219.

The appropriation of 1853 was not, strictly speaking, the first one made. In the Army Appropriations Act of March 3 1849 (9 *Statutes at Large*, 372), \$50,000 was set aside "To defray the expenses of Topographical [—] of surveys of routes from the valley of the Mississippi to the Pacific Ocean." But I find no record of the funds having been used for this purpose.

The reports referred to above by Mr. Chase are entitled "Reports of Explorations and Surveys to Ascertain the most practicable and economical Route for a Railroad

of Congress since that time has the Pacific railway failed to come up for discussion of some sort.

A few of the earliest Pacific railway bills which were considered by Congress may claim attention because they foreshadowed future action. On March 31, 1852, the Committee on Post Offices and Post Roads in the Senate introduced a bill to carry out Whitney's project.¹

Early in 1855 there was under consideration in the Senate a bill providing for a single road running from the western boundary of one of the tier of states which have the Mississippi for their eastern boundary, to the eastern line of California. A grant of land and a cash mail contract were to be given to the lowest bidder for the building of such a road, and bids were to be received from individuals, companies, or corporations.

A substitute for this measure was moved February 15, 1855, by Senator Gwin, of California. This provided for one road to begin at the western boundary of Texas, running to the navigable waters of the Pacific in the state of California, to be called the Southern Pacific; a second, beginning at the western boundary of Iowa or Missouri and running to San Francisco, the Central Pacific; and a third, to run from the western boundary of Wisconsin to the navigable waters of the Pacific in Washington or Oregon, the Northern Pacific. Senator Gwin's substitute passed the Senate February 19, 1855, but went no further.²

The House of Representatives, December 20, 1860, passed a bill from the Mississippi River to the Pacific Ocean made under the direction of the Secretary of War, in 1853-4, according to Acts of Congress of March 3, 1853, May 31, 1854, and August 5, 1854." The eleven volumes contain a wonderful mass of information of all sorts concerning the trans-Mississippi country, and if they were read they would certainly have proved to those who still doubted it the feasibility of the Pacific railway. Possible locations for the road were found at short intervals between the thirty-second and the forty-ninth parallels of latitude, their terminal points ranging from San Diego to Puget Sound on the west, and on the east from Fulton, Arkansas, to St. Paul, Minnesota. The air-line lengths varied from 1360 to 1740 miles, and the ground-line lengths from 1533 to 2290 miles.

¹ *Congressional Globe*, Thirty-second Congress, first session, p. 941.

² Notice of its passage by the Senate was received by the House, but it does not subsequently appear on the records.—*Congressional Globe*, Thirty-third Congress, second session, p. 814.

bill providing for a central and a southern road, the expense to the government being estimated at \$96,000,000.¹ It was not long after this, however, that Congress ceased to consider propositions for spending money on internal improvements in the South, and the southern line dropped out of the plan.

Naturally any project which had so strong a hold on the people of the country as had the Pacific railway would be made use of as political capital. The Republicans first² gave it party recognition in their platform of 1856.³ In 1860 the Democrats at the Charleston (S. C.) convention pledged "such constitutional government aid as will insure the construction of a railroad to the Pacific coast at the earliest practicable period."⁴ The other Democratic convention of that year, held at Baltimore, framed a similar plank, bounding their willingness to aid the scheme by constitutional limits only.⁵ The Republican party at its convention of the same year resolved "That a railroad to the Pacific Ocean is imperatively demanded by the interests of the whole country; that the Federal Government ought to render immediate and efficient aid in its construction; and that, as a preliminary thereto, a daily overland mail should be promptly established."⁶ In June, 1864, the Republican party again "*Resolved*, That we are in favor of a speedy construction of the railroad to the Pacific coast."⁷ Meanwhile the friends of the road in Congress were far from idle.

It would be impracticable to detail all the propositions which were presented for the consideration of Congress during the fifties

¹ *Congressional Globe*, Thirty-sixth Congress, second session, p. 171.

² The Democratic Convention of 1856 was held at Cincinnati June 2 to 6. McKee, in his *Platforms and Parties*, p. 55, gives this section:

"*Resolved*, That the Democratic party recognizes the great importance, in a political and commercial point of view, of a safe and speedy communication, by military and postal roads, through our own territory between the Atlantic and Pacific coasts of this Union, and that it is the duty of the Federal Government to exercise promptly all its constitutional power for the attainment of that object."

In several other places where I have found the platform no such plank was given.

³ Stanwood, *History of Presidential Elections*, p. 207.

⁴ *Ibid.*, p. 219.

⁶ *Ibid.*, p. 231.

⁵ *Ibid.*, p. 224.

⁷ *Ibid.*, p. 241.

and the early sixties.¹ Scores of bills were introduced, and many ideas which were not thus put into formal shape appeared in the debates. The Whitney plan called for a grant of all the lands in a strip 60 miles wide. A similar one narrowed the strip to 40 miles in width, and gave only the alternate sections.² The 40 was cut to 30³ and then the 30 miles was cut to 24 miles.⁴ Still another proposition gave ten alternate sections on each side of the track.⁵ Finally it was cut down to five alternate sections on each side of the track.⁶ Some bills gave arable lands and mineral lands indiscriminately; one retained all lands containing minerals other than coal or iron, but replaced them with arable lands lying farther from the road.⁷ Another retained all mineral lands, replacing them in the same way. Once it was proposed that the railway might buy mineral lands at the regular price for arable lands.⁸ It was proposed that the government organize the workmen on a military basis;⁹ again that the railway company be empowered to do so.¹⁰ At one time a bill passed the House of Representatives providing that the road must be completed within 15 years, and granting an additional bonus in subsidy bonds of \$2,000,000 for each year's reduction from the allotted time.¹¹ One committee reported a measure providing that the bonds of the road be made salable by paying the first year's interest from the treasury of the United States, and guaranteeing its payment for the suc-

¹ The early congressional history of the Pacific railway has been followed, session by session, in John P. Davis's *The Union Pacific Railway* (Chicago, 1894). Those who wish a minute account will find it there.

² *Congressional Globe*, Thirty-sixth Congress, first session, p. 2440.

³ *Ibid.*, Thirty-third Congress, second session, p. 749.

⁴ *Ibid.*

⁵ 13 *Statutes at Large*, 356.

⁶ 12 *Statutes at Large*, 489.

⁷ *Congressional Globe*, Thirty-sixth Congress, first session, p. 2440.

⁸ *Ibid.*, Thirty-eighth Congress, first session, p. 2328.

⁹ *Ibid.*, Thirty-sixth Congress, first session, p. 2451.

¹⁰ *Ibid.*, Thirty-seventh Congress, third session, p. 1180.

¹¹ *Ibid.*, Thirty-sixth Congress, second session, p. 381.

ceeding 19 years.¹ Unreasonable plans were discussed and laid aside. Reasonable ones were talked to death or amended to death, until it was hard to tell whether the Pacific railway fared worse at the hands of its enemies or of its friends.

The project had in early years been for one road only, the northern one. Later the local interests of the various sections came into the problem, and multiple road schemes were brought forward. When the outbreak of the war left legislation in the hands of a northern Congress the scattered energies were again concentrated on one road, and that the central one. After much wrangling, a bill was framed which could command enough votes, and passed the House May 6, 1862, by a vote of 79 to 49.² The Senate passed it with slight changes June 20, 35 to 5,³ the House concurred, June 24, in the Senate amendments by a vote of 104 to 21,⁴ and July 1, 1862, it became a law⁵ by the signature of President Lincoln, who had long warmly favored the project.

¹ *Congressional Globe*, Thirty-eighth Congress, first session, p. 2329.

² *Ibid.*, Thirty-seventh Congress, second session, p. 1971.

³ *Ibid.*, 2840.

⁴ *12 Statutes at Large*, 489.

⁵ *Congressional Globe*, Thirty-seventh Congress, second session, p. 2905.

CHAPTER II.

THE CHARTER ACTS.

The Pacific Railway Act of 1862 had for its object the building of a road which should connect the eastern railway net with the one which had already begun to come into existence on the Pacific coast. This road was not, however, to begin where the roads from the East then ended. Across Iowa private initiative could be trusted to supply the lack, so the initial point of the Pacific railway was located on the Missouri River, at Omaha. This city had no rail communication with the East until December 1867, when the Chicago and Northwestern came through to that point.

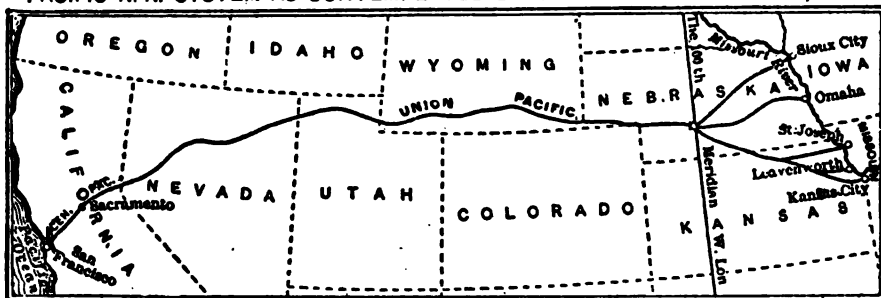
The Pacific Railway Act provided for a road to run from Omaha to San Francisco. The eastern portion of this trunk line, from Omaha to the state line of California, was to be built by the Union Pacific Railroad Company. This company was to be organized *de novo* for this purpose, the first corporation since the Second United States Bank to receive its charter from the National Government.

The western part of the main trunk, from the eastern line of California to San Francisco, was to be built by the Central Pacific Railroad Company, a California corporation.

Besides this main line, the act provided for other branch lines. Each of the various cities on the Missouri River wanted the valuable privilege of being the eastern terminus of the system, and to quiet these demands a system of branches was devised. Sioux City, on the north, was provided for in this way: When that point had been reached by a railway running through Iowa or Minnesota—*i. e.*, from Chicago or St. Paul—the Union Pacific Company was required to construct a branch connecting

Sioux City with the main line at a point not west of the one-hundredth meridian. From Kansas City, the Leavenworth Pawnee and Western was to build an extension to the north and west, joining the main line, like the Sioux City branch, at a point not west of the one hundredth meridian. This company was also authorized to build a short line from Leavenworth to connect that city with the Kansas City branch. St. Joseph was to be the initial point of a line by way of Atchison running

PACIFIC R. R. SYSTEM AS CONTEMPLATED BY THE ACT OF JULY 1ST, 1862.



westward. It was expected that 100 miles of track would suffice to effect a junction with the Kansas City branch. Thus there would be a symmetrical system of branches to collect the traffic of the Missouri River points and concentrate it at the one hundredth meridian for its trip westward. The Pacific railway as contemplated in the Act of 1862 is shown in the accompanying map.

To insure the building of these roads a government subsidy was offered in the shape of a land grant and a loan of the credit of the United States. This, however, did not apply to the short line from Leavenworth. On each side of the track the railway company was to receive five sections of land, the alternate ones—*i. e.*, one-half the land in a strip 20 miles wide. This would make the total grant of land about 33,000,000 acres.

But this land grant could not be made a source of immediate income, for sales must wait on settlement, and settlers would come in but slowly until the railway was built. The credit loan

was the device for providing ready money. This aid was given in the following manner: when short sections, of specified lengths, had been completed, the Secretary of the Treasury was authorized to turn over to the railway officials bonds of the United States, which could be sold. For those portions of the road which ran through level country—*i. e.*, east of the Rocky Mountains and west of the Sierra Nevadas—there were to be given for every mile of road sixteen currency bonds of the United States of the denomination of \$1000, to run thirty years, with interest at 6 per cent. For the 150 miles where the road, leaving the plains, climbed across the Rockies to reach the interior plateau, the bond subsidy was to be trebled—\$48,000 per mile. The provision was the same for the 150 miles eastward from the western base of the Sierra Nevadas. For the plateau region between the Rockies and the Sierra Nevadas the subsidy was to be \$32,000 per mile. Thus the total issue of United States bonds for the purpose of securing the construction of the Pacific railway was, in round numbers, \$61,000,000. But these bonds were not a gift to the railway companies; they were a loan, to be repaid at maturity, principal and interest, and they were constituted a first mortgage on the roads which they were issued to aid in building. Such was the offer which Congress, in 1862, saw fit to make for a railway to the Pacific.¹

Organization was effected by the Union Pacific Company under this act and some work upon its road was done, but it gradually became evident that the Pacific railway would not be built under the Act of 1862.

Proposals for its amendment were not uncommon, most of them aiming to secure the advantages of connection with the Pacific railway system for certain localities, as Lawrence, Topeka, etc.²

But at last there was enacted an amendatory act which radically altered the terms of the Act of 1862. This received

¹ A discussion of the reasons for this congressional action and some of the views expressed by individual congressmen will be given after the construction of the road has been dealt with.

² *Congressional Globe*, Thirty-eighth Congress, first session, pp. 523, 982, 1022.

the President's signature July 2, 1864.¹ The most important provision related to the privilege of issuing bonds and to the Government's mortgage on the road. The companies received the new privilege of issuing first mortgage bonds equal in amount and of tenor similar to the United States bonds provided for in the Act of 1862. Thus the government gave up its first lien on the roads and accepted a second one in its stead. The land grant was doubled, being made ten alternate sections on each side of the track for every running mile of road. Besides these more important changes, which doubled the resources of the companies, several minor ones helped to put them on a more favorable footing.²

¹ 13 *Statutes at Large*, 356.

² A more detailed discussion of the Acts of 1862 and 1864 does not seem necessary at this point. Individual features of them, which have here been omitted, will be mentioned from time to time as the narrative requires, and the entire acts are reprinted, in abstract or by citations, in the Appendix, pages 101 to 115, for the benefit of those who wish to know their terms more minutely.

CHAPTER III.

THE BUILDING AND THE COST OF THE UNION PACIFIC.

It was not long after the passage of the Act of 1862 that work under it began. The Central Pacific Railroad Company, to which the building of the western end of the line was assigned, had been organized, in 1861, under California state law. On October 7, 1862, it formally accepted the terms offered by Congress, and the work of construction began January 8, 1863.

The Union Pacific Railroad Company, which was to build the eastern part of the line, effected its temporary organization according to the terms of the act, and books for stock-subscriptions were opened in the leading cities of the country. Thirty-one shares¹ of \$1000 each were subscribed for, and \$17,300 paid in. There the matter stopped. Railway men knew that a mile of road in Illinois cost \$33,000; in Iowa, \$35,000; in the level parts of California, \$34,000.² A considerable proportion of the able-bodied men of the country was in the army, and the prices of both labor and materials were abnormally high. Between the eastern system of railways and the initial point of the proposed road was a gap of hundreds of miles, making it necessary to carry materials by way of the Missouri River, a hazardous and costly mode of transportation. Under the circumstances, the capitalists of the country did not consider the Union Pacific a promising investment.

Meanwhile, Thomas C. Durant, of New York, a man of wide experience in railway building and of large resources, became

¹ Forty-second Congress, third session; House Report No. 78, February 20, 1873 (*Affairs of the Union Pacific Railroad Company*—Mr. J. M. Wilson, Chairman), Testimony taken by the Committee, p. 604.

² *Congressional Globe*, Fortieth Congress, second session, p. 2427.

interested in the enterprise and took hold of it with characteristic vigor. He not only made a stock-subscription of his own, but also secured subscriptions among his friends. To do this he advanced for them the 10 per cent. required by law to be paid in before the permanent organization could be effected, and agreed to find persons to take it off their hands in case they wished to withdraw from the venture. On October 29, 1863, 2177 shares of \$1000 each had been subscribed for¹ and a board of thirty directors was chosen. In the list we find such names as August Belmont, of New York; C. A. Lambard, of Boston; C. S. Bushnell, of New Haven; Joseph H. Scranton, of Scranton, Pennsylvania; J. Edgar Thompson, of Philadelphia; S. C. Pomeroy, of Atchison, Kansas, besides those who were next day chosen officers. These were: President, General John A. Dix; Vice-President, Thomas C. Durant; Secretary, H. V. Poor, and Treasurer, J. J. Cisco, all of New York. Immediately after organization was effected men were put to work, ground being broken at Omaha December 2, 1863.³ The sum of \$218,000 which had been paid in on stock-subscriptions was used up, and debts contracted for from \$200,000 to \$300,000 more. The company was so hard pressed on these debts that it finally resorted to the expedient of selling part of the materials and cars to raise funds.⁴

The line as first projected ran west from Omaha, but as heavy grades would thus be encountered, a somewhat circuitous route was finally settled upon, starting south from the city.⁵ Still the first thirty or forty miles were expensive.

As this section of the road approached completion it was seen that New York capitalists were not to be induced to put the enterprise through;⁶ work must soon cease for lack of funds. On

¹ *Affairs of the Union Pacific Railroad Company*, p. 599.

² *Ibid.*, p. 579.

³ *Report of the Directors of the Union Pacific Railway Company for 1884.*

⁴ *Affairs of the Union Pacific Railroad Company*, p. 63.

⁵ *Ibid.*, p. 39.

⁶ *Ibid.*, p. 39.

May 12, 1864, therefore, a committee was appointed to let a contract for building one hundred miles of road.¹

The enactment of the Act of 1864 followed soon after this, doubling, as has been said, the funds from which to build the road.

Even then the friends of Durant were so doubtful of the success of the enterprise that they availed themselves of the offer made them when they subscribed, and Durant was made responsible for three-fourths of the sum (\$2,000,000) required to be subscribed before organization was authorized.²

As a result of the labors of the committee appointed in the preceding May, a proposal was received on August 8, 1864, from H. M. Hoxie, to build one hundred miles of road at \$50,000 per mile. This matter was arranged at New York between Durant and H. C. Crane, who acted as Hoxie's attorney.³ Crane was intimately connected with the Union Pacific as stockholder, director and otherwise; Hoxie was an employee of the road. Oliver Ames says distinctly that Hoxie was a man of no means,⁴ of no responsibility.⁵ Still Durant declares that the Hoxie contract was made in good faith.⁶ At any rate it was accepted,⁷ and October 4, 1864, Hoxie proposed its extension to cover the line from Omaha to the one-hundredth meridian. This proposal was likewise accepted.⁸ So H. M. Hoxie, whatever his financial standing may have been, stood bound to construct for the Union Pacific Company $247\frac{45}{100}$ miles of road, for which he was to receive over \$12,000,000.

Aside from the relations existing between Durant, Crane and Hoxie, the terms of the contract would lead one to suspect that there was some purpose in mind other than that which appeared

¹ Forty-second Congress, third session; House Report No. 77, February 18, 1873 (*Credit Mobilier Investigation*—Mr. Poland, Chairman), Testimony taken by the Committee, p. 365.

² *Credit Mobilier Investigation*, p. 388; *Affairs of the Union Pacific Railroad Company*, p. 515.

³ *Affairs of the Union Pacific Railroad Company*, part 2, p. 2.

⁴ *Ibid.*, p. 256.

⁷ *Ibid.*, part 2, p. 4.

⁵ *Ibid.*, p. 285.

⁸ *Ibid.*, part 2, p. 4.

⁶ *Ibid.*, p. 69.

on the face of the matter. The contractor was specifically exempted from paying more than \$85,000 for any one bridge; the excess in price of iron above \$130 per ton at Omaha was to be borne by the Company; if required to Burnetize¹ ties, an additional 16 cents per tie was to be paid; and, most important, acceptance of the contract bound the contractor to subscribe, or cause to be subscribed to the capital stock of the Union Pacific, \$500,000.²

As early as September 30, 1864, that is, some time before its extension had been voted, Hoxie had agreed with Durant to assign his contract to such parties as he (Durant) might designate. October 7, 1864, an agreement was drawn up binding its signers to take the contract from Hoxie and to subscribe for carrying it out the sum of \$1,600,000. This liability was divided as follows: Thomas C. Durant, \$600,000; C. S. Bushnell, \$400,000; Charles A. Lambard, \$100,000; H. S. McComb, \$100,000; H. W. Gray, \$200,000; etc.³ According to the terms of the agreement one-fourth of the sums subscribed was paid in, \$400,000 in all, and this amount was used on the road. The men who had assumed the Hoxie contract now stood in the relation of partners, liable not only for the sums subscribed, but to the extent of their fortunes. Some of them became fearful and concluded that it would be better to lose the sums already sunk in the enterprise than to go on and take greater risks.⁴ They therefore failed to respond to the call for the second installment of their subscriptions.⁵

About this time, August 1865, an important step was taken in getting the brothers, Oakes and Oliver Ames, to take hold of the project.⁶ Oakes Ames had become interested in the Pacific railway while a member of the Committee on Railroads in the House of Representatives,⁷ and his personal influence in Massa-

¹ A process by which cottonwood ties were made more durable.

² *Affairs of the Union Pacific Railroad Company*, part 2. p. 2.

³ *Ibid.*, part 2. p. 5.

⁴ *Ibid.*, p. 64, and *Credit Mobilier Investigation*, p. 365.

⁵ *Affairs of the Union Pacific Railroad Company*, p. 365.

⁶ *Ibid.*, p. 4.

⁷ *Oakes Ames Memoir*, p. 5.

chusetts, together with his great financial strength, made him a valuable ally of those who had started the road. Plans for proceeding were again discussed, and it was agreed that the only feasible way to enlist the necessary capital was to make use of a construction company. The scheme of building railways by construction companies organized among the stockholders was not new; it had been tried successfully in Iowa.¹ Exhaustive contracts were not a new device.² So all the Union Pacific people had to do was to adapt to their own uses methods which others had elaborated.

It having been decided to make use of a construction company, an examination of charters followed. This led to the rejection of one which Bushnell had bought in Connecticut,³ and to the choice of a Pennsylvania corporation as better meeting their needs. This was the Pennsylvania Fiscal Agency, which had been chartered to build railways in the South and West⁴ by an act of the state legislature of Pennsylvania, approved November 1, 1859.⁵ On the fifth of the same month books had been opened in Philadelphia and stock subscribed for.⁶ Later it became known that the organization then effected was irregular, and it was treated as a nullity.⁷ May 29, 1863, books were again opened, stock subscribed, the required per cent. paid in, and organization properly effected.⁸ March 2, 1864, Durant opened negotiations for the purchase of the charter-rights of the Fiscal Agency, and on the following day the bargain was closed, Durant paying to the original subscribers what they had invested, they assigning their stock.⁹ Previous to this time there had been no connection whatever between the men of the Union Pacific and of the Fiscal Agency.

On March 26, 1864, an amendatory act changed the name from the Pennsylvania Fiscal Agency to the Credit Mobilier of

¹ *Affairs of the Union Pacific Railroad Company*, p. 164.

² *Ibid.*, p. 420.

³ *Ibid.*, p. 39.

⁴ *Credit Mobilier Investigation*, p. 199.

⁵ *Affairs of the Union Pacific Railroad Company*, p. 7.

⁶ *Ibid.*, p. 144.

⁸ *Ibid.*, p. 146.

⁷ *Ibid.*, p. 146.

⁹ *Ibid.*, p. 147.

America,² and as such it later became widely known. Thus the Credit Mobilier became an adjunct of the Union Pacific Railroad Company.

The reason for securing such a company as the Credit Mobilier is obvious. No firm could be induced to undertake the building of the road if each member was liable to the extent of his property.³ The risk was too great. But it was believed that if a company was secured in which the liability was limited to the amount of the subscription to stock, as in the Credit Mobilier, capital could be enlisted. This proved to be the case, and the necessary funds were quickly subscribed.

As a matter of convenience the offices of the Credit Mobilier were to be in New York, where the headquarters of the railway were located, but under the terms of its charter it could not cease to be a Pennsylvania corporation. To get around this difficulty, the device of a New York branch was resorted to. The corporate existence of the Credit Mobilier was maintained in Pennsylvania, the board of directors, the officers, and the executive committee being elected at meetings held in Philadelphia. This executive committee then chose from among the stockholders of the Credit Mobilier and of the Union Pacific, a number of men to constitute what they called a railway bureau.⁴ This body had its office in a room adjoining the offices of the Union Pacific.⁴ The executive committee attended to all the larger fiscal transactions, while the railway bureau had charge of the construction of the road, payments for work, and other details.⁵ Under this arrangement the work progressed satisfactorily. Part of the necessary capital of the Credit Mobilier was secured by transferring to its books the subscriptions which had been made for carrying out the Hoxie contract by the men who assumed it.⁶ They were relieved of their former obligations by the transfer of the Hoxie contract to the corporation of which they had just become stockholders. This change was made March 15,

² *Affairs of the Union Pacific Railroad Company*, p. 9.

³ *Ibid.*, pp. 39-40.

⁴ *Ibid.*, p. 153.

⁵ *Ibid.*, pp. 148, 131.

⁵ *Ibid.*, p. 148.

⁶ *Credit Mobilier Investigation*, p. 366.

1865,¹ some six months after they had taken the contract off Hoxie's hands. The transferred subscriptions, \$1,600,000, were supplemented by others, securing for the Credit Mobilier a working capital of upwards of \$2,000,000,² and the work, which otherwise must have stopped within sixty days, was pushed vigorously.³

But note how incongruous was this arrangement. The Credit Mobilier was nominally a Pennsylvania corporation, while at the Pennsylvania office no business was done. The New York concern was in form only a branch of the Pennsylvania corporation, yet it transacted all the business which the Credit Mobilier ever had. The Union Pacific Railroad was being built, not by the Union Pacific Company, but by the Credit Mobilier, and the Union Pacific officers simply got the resources into available shape and turned them over to the Credit Mobilier. The United States bonds it sold and transferred the cash. Sometimes it turned over the proceeds of the sale of first-mortgage bonds, sometimes the bonds themselves.

This state of affairs was in part due to the unfortunate looseness with which the Pennsylvania legislature had framed the Credit Mobilier charter. The practice of granting charters containing almost no limitations was at that time common. Unfortunately it is not yet unknown.

Under the new impulse which the Credit Mobilier gave to the enterprise, the work of construction was carried forward so rapidly that during the year 1866 the government passed upon and accepted 270 miles of track as meeting the requirements of the law.

About the time when the road had reached the one-hundredth meridian, quite a number of the stockholders of the Credit Mobilier had become large stockholders of the Union Pacific, among them Mr. Ames, Mr. Dillon, and Mr. Duff. Naturally they desired to be represented on the Union Pacific board, and

¹ *Affairs of the Union Pacific Railroad Company*, p. 64.

² *Credit Mobilier Investigation*, p. 366.

³ *Affairs of the Union Pacific Railroad Company*, p. 659.

Oliver Ames and two or three others, at the election of October 3, 1866, went into the directory of the Union Pacific.¹ From this time on there were two factions among the Union Pacific people, one headed by Durant, the other by Oakes Ames. Durant's claim to leadership lay in the importance of what he had already accomplished. Ames had yet to win his spurs. It has repeatedly been said that the struggle between Durant and Ames was due to their different views as to the Union Pacific enterprise and their different motives in taking it up. Durant is said to have believed that the road would be a commercial failure, and that the only money to be made out of it was to be made on construction contracts; while Ames believed in the future of the road and looked to the legitimate business of the road after its completion for his profit. The evidence as to contracts made by these men for construction, however, does not exhibit any great rapacity on Durant's part, nor any great tenderness toward the road on Ames's part. It seems that the friction between these men was rather of a personal nature. Durant carried the enterprise as far as his resources would allow, and then had to give way to Ames. Whoever had succeeded him as leader would probably have aroused Durant's jealousy and had his opposition to contend with.

Be that as it may, the decided friction between the two parties manifested itself repeatedly when the letting of contracts was under discussion, and the execution of several engagements which had been formally entered into was prevented. Of this sort were five which deserve attention. Their history shows the internal difficulties of the company, which were at times so serious as to carry the questions into court. It also shows the evolution of the terms of the contract under which the most difficult parts of the road were built, the Ames contract.

The first of these never-executed agreements is known as the Boomer contract.² Late in 1866 Durant made a contract with

¹ *Affairs of the Union Pacific Railroad Company*, p. 598.

² On the books it is called the Gessner contract. Boomer appointed Gessner his agent and later sold the contract to him.—*Affairs of the Union Pacific Railroad Company*, p. 69.

L. B. Boomer, of Chicago, which called for the building of 150 miles of road, beginning at the one-hundredth meridian. East of the North Platte River the price stipulated was \$19,500 per mile, exclusive of equipment. The bridge over that stream was to be paid for at actual cost. West of the river the price was \$20,000 per mile. By paying for work already done and giving ten days' notice, Durant could at any time terminate this arrangement.¹ President Dix, Treasurer Cisco, and other conservative members of the board sustained Durant in his action in regard to this contract,² but it was never approved by the board as a whole.³ Oliver Ames afterward declared that the Boomer contract was a secret arrangement, a bogus thing of Dr. Durant's, and that Boomer was a man of no responsibility.⁴ At any rate, the Credit Mobilier, although it had received no new contract, continued to build the road west of the one-hundredth meridian precisely as it had done east of that point. This was done in expectation of another contract on the same terms as the Hoxie contract, and as the stockholders of the Credit Mobilier and of the Union Pacific were the same persons⁵ this expectation was not likely to prove without foundation.

Durant's move in regard to the Boomer contract having been successfully met, the next one was made by the other side. There was presented to the board of directors of the Union Pacific, on the 5th of January 1867, a resolution extending the Hoxie contract to the point then completed, namely, 305 miles west of Omaha, and authorizing the officers to settle with the Credit Mobilier for the added 58 miles at \$50,000 per mile. By a vote of eight to four the resolution was passed.⁶ According to the Act of 1864,⁷ the President of the United States appointed five members of the board of directors of the Union Pacific who should protect the interests of the government. The four votes against the extension of the Hoxie contract were cast by gov-

¹ *Affairs of the Union Pacific Railroad Company*, part 2, p. 7.

² *Credit Mobilier Investigation*, p. 368.

³ *Affairs of the Union Pacific Railroad Company*, p. 67.

⁴ *Ibid.*, p. 285.

⁶ *Ibid.*, p. 67.

⁵ *Ibid.*, p. 284.

⁷ Section 13, p. 113, below.

ernment directors, one voting in favor of it.¹ Durant, who was absent on necessary business of the company when this resolution was passed, entered a protest against its being carried out, and also served an injunction on the officers to prevent their making the proposed payments. His objections were that, although the Hoxie contract was originally let in good faith, no one being interested in it, the Credit Mobilier and the Union Pacific had since become identical in interest, and that this extension was simply letting a contract to themselves; that no new subscriptions to the Union Pacific stock were required because of this extension; that this strip of road, built at much less cost than the proposed price, had been accepted by the government as completed, and so that carrying out this contract would entail heavy loss upon the company, as the actual cost of this part of the road, when fully equipped, was about \$27,500 per mile. January 24, nineteen days after its passage, the order to extend the contract was rescinded.²

The condition of the finances of the two closely allied corporations made it necessary, early in 1867, earnestly to attempt measures of betterment. One form which this effort took is shown by a letter of February 13. The Credit Mobilier proposed to purchase of the Union Pacific, land-grant bonds to the amount of \$3,000,000, at 80; first-mortgage bonds to the amount of \$2,060,000 at 85; certificates convertible into first-mortgage bonds to the amount of \$750,000, at 80, these certificates to bear 6 per cent. interest until exchanged. The Credit Mobilier further proposed to loan or procure to be loaned to the Union Pacific \$1,250,000 on four months' time, at 7 per cent. annual interest and $2\frac{1}{2}$ per cent. commission, with first-mortgage bonds at $66\frac{2}{3}$ per cent. as security. On the other hand, the Union Pacific was to pay to the Credit Mobilier the balances due on previous debts at least as soon as the Credit Mobilier had paid for the securities named above. It was also provided that the Hoxie contract should be extended 100 miles west of the one-hundredth merid-

¹ *Affairs of the Union Pacific Railroad Company*, p. 67.

² *Ibid.*, pp. 68-70.

ian at \$42,000 per mile.¹ This arrangement would have given the Union Pacific \$6,001,000 of ready funds. As the contract price was considerably in excess of what this part of the road was actually costing, it would have given the Credit Mobilier a profit in hand on that part of the 100 miles of road which had at that time been completed, and an inconsiderable risk on the remainder of what the contract covered. The executive committee of the Union Pacific accepted this proposition,² but it was not carried out.

However, an understanding was reached about this time that whenever a contract was entered into, it should be so placed that the benefit would inure to the stockholders of the Credit Mobilier. On the strength of this understanding the capital stock of the Credit Mobilier was increased. This was originally intended to be \$2,000,000; September 21, 1865,³ it was made \$2,500,000 nominally, although not all of the new stock was taken up;⁴ now, in February 1867, it was increased to \$3,750,000. The difficulty in getting the old subscribers to take this new stock was met in this way: for \$1000 in cash there was promised \$1000 in Credit Mobilier stock and a \$1000 first-mortgage bond of the Union Pacific. That this offer would prove attractive will appear when it is considered that the first-mortgage bonds were then worth 85, thus leaving the Credit Mobilier stock to represent 15 per cent. of the price paid. On these terms the new stock was all taken and the cash turned over to the Union Pacific in payment for bonds. The \$1,250,000 thus put into the Union Pacific treasury was used to cancel a part of the \$3,500,000 or \$4,000,000 of debt which it then owed.⁵

Having spent this sum, things came to a standstill again almost as bad as before. The Union Pacific then allowed Bushnell to undertake the sale of a large block of first-mortgage bonds which it had on hand and on which it was borrowing money at

¹ *Credit Mobilier Investigation*, p. 171.

² *Affairs of the Union Pacific Railroad Company*, p. 172.

³ *Ibid.*, p. 78.

⁵ *Ibid.*, p. 40.

⁴ *Ibid.*, p. 15.

extravagant rates of interest, up to $14\frac{1}{2}$ per cent.¹ By wide advertising and great diligence Bushnell met with marked success, and in less than six months bonds were sold to the amount of \$10,000,000, the price being put up from 90 to 95.² Thus the financial difficulties were removed.

To carry out the tacit agreement made in February, that the Credit Mobilier stockholders should have the profits on constructing the road, attempts were made to let contracts direct to that corporation, but Durant objected on account of the identity of the two organizations and twice prevented such action by injunctions.³

One of these attempts gave rise to what is known as the Williams contract. March 1, 1867, John M. S. Williams proposed to the company to take the building of 267.57 miles of road westward from the one-hundredth meridian as the initial point, the price for the first 100 miles being \$42,000 per mile, for the remainder \$45,000 per mile. As another feature of the contract Williams was to bind himself to procure subscriptions for Union Pacific stock to the amount of \$1,500,000. The board accepted his offer and gave instructions that a contract be drawn up on this basis. Williams assigned the contract to the Credit Mobilier, and the Credit Mobilier accepted the assignment. Then Durant, on March 27, entered a protest against letting this contract, stating as grounds that part of the road was already built and accepted by the government, that the price was too high, that no time limit for completing the work was specified. His protest was backed up by an injunction, so nothing was done in the matter. This protest shared the same fate as his previous one—both were expunged from the minutes.⁴

June 24, 1867, Williams again made a written proposal to the Union Pacific. It was this: To build the road from the one-hundredth meridian to the base of the Rocky Mountains, 267.52 miles, at \$50,000 per mile, the work to be completed

¹ *Affairs of the Union Pacific Railroad Company*, p. 41.

² *Ibid.*, p. 42.

⁴ *Ibid.*, pp. 70-1.

³ *Ibid.*, p. 41.

before January 1, 1868. The provision for a stock subscription was omitted this time. Another proposal accompanying this one was to assign the contract, if received, to the Credit Mobilier.¹ The June proposal, like the one made in March, came to naught. This ends the series of failures at contract-making.

It had been anticipated that great difficulty and heavy expense would be met in crossing the Rocky Mountains, but during 1867 it became generally known that there was an easy route by way of the Black Hills, requiring no grade heavier than ninety feet to the mile, and knowledge of this fact greatly strengthened confidence in the completion of the road. This route lay through what had previously been called the Cheyenne Pass, Cheyenne and Sherman being located there. From this time on it was called the Evans Pass, it having been discovered by an engineer named Evans, acting under the guidance of the chief engineer of the road, General Dodge.²

Meanwhile construction was being pushed. The Hoxie contract had been completed to the one-hundredth meridian October

¹ *Affairs of the Union Pacific Railroad Company*, pp. 162-3.

² The way in which this pass was located is interesting. General Dodge says: "Of course the key to any line crossing the continent is the crossing of the Rocky and other mountains. As you know, they are the Black Hills, the divide of the continent, the Wasatch Mountains, the Humboldt and the Cascade. The line east of the Rocky Mountains was entirely controlled by where we could cross those mountains. It took several years before we could discover that point. It was finally discovered by my running what was known as a foot line at the base of the mountains, from the Laramie River to the south, and a summit line at the top of the mountain, and finding the lowest point in the summit and the highest point in the plains. That happened to be at Sherman and Cheyenne That, of course, controlled the line from the Rocky Mountains east to the Missouri River."—Fiftieth Congress, first session; Senate Executive Documents, No. 51 (*Report of the Commission and of the Minority Commissioner of the United States Pacific Railway Commission Appointed by the Act of Congress Approved March 3, 1887*.—R. E. Pattison, Chairman), p. 3792.

Just when the character of the Evans Pass became known to the builders of the Union Pacific cannot be said. An engineer's report of November 23, 1866, spoke very accurately about it. One of the directors, Mr. Williams, was thoroughly acquainted with both the engineer's reports and the country through which the road ran. Durant also knew the reports pretty well. But Bushnell, who on the whole was very well informed as to the affairs of the Union Pacific, says he does not think any other member of the board knew anything about the matter until late in 1867. It would be interesting to know whether or not knowledge of this easy route came before the letting o

5, 1866,¹ and beyond that point the Union Pacific made all its bargains for work subject to any future contract which might be let.² By August 16, 1867, 188 miles more had been built,³ and a letter of that date from Oakes Ames proposed the terms on which he would become responsible for building the 667 miles of road beginning at the one-hundredth meridian.⁴ The board passed a resolution the same day directing the officers to obtain the written consent of the stockholders, a provision upon which Durant insisted,⁵ and then to ratify the contract, giving Ames the option of extending it westward to Salt Lake if he chose.⁶ The prices specified were: 100 miles at \$42,000 per mile, 167 at \$45,000, 100 at \$96,000, 100 at \$80,000, 100 at \$90,000, 100 at \$96,000.⁷ Thus Ames assumed a contract aggregating \$47,915,000.

These prices, although high for the eastern sections of the part which they covered, were, on the whole, perhaps not exorbitant. The rates for the western sections would undoubtedly have been made considerably higher if the eastern part with its assured profit had not been included. Moreover, this contract insured the building of the difficult portions by providing that when the proceeds of the bonds were not sufficient to pay the contract prices, the contractor should subscribe for enough stock to furnish the money for paying the balance. In other words, Ames was bound to take in stock, at par, that part of his pay which was not produced by selling the two kinds of bonds. In no other way could security have been obtained for the building of the difficult and risky portions of the road. In fact, it was impossible to let contracts to outsiders for even the easy portions of the road. John Duff, who had done a great deal of work of

the next contract which we have to consider, the most important one of all which were made. But unfortunately definite information as to this date is not forthcoming.—*Affairs of the Union Pacific Railroad Company*, pp. 42, 43, 85, 92, 238, 239, 252-3, 508, 550-1, 651.

¹ *Affairs of the Union Pacific Railroad Company*, p. 65.

² *Ibid.*, p. 115.

³ *Ibid.*, p. 113.

⁴ *Credit Mobilier Investigation*, p. 365.

⁵ *Affairs of the Union Pacific Railroad Company*, p. 542.

⁶ *Ibid.*, part 2. p. 12.

⁷ *Ibid.*, p. 10.

this sort, made repeated efforts to let contracts among experienced and competent contractors, appealing to his own sub-contractors in his attempts to find some one who would do the work, but he was unable to get anyone to go out there.¹ Horace Clarke said, in 1873, that he thought the Ames contract the wildest contract he ever knew to be made by a civilized man.² Be that as it may, the work was pushed to completion under it.

Although this contract did not intimate in its terms that anyone besides Oakes Ames and the Union Pacific Railroad Company was in any way concerned in the matter, there undoubtedly existed a more or less definite understanding that the persons to profit thereby were the stockholders of the Credit Mobilier.³ The arrangement by which the profits were distributed to them is described in the tripartite agreement, which was signed October 15, 1867.⁴ General Benjamin F. Butler suggested this form of contract as obviating the difficulty which would arise if any single stockholder of the Credit Mobilier should object to the transfer of responsibility to that organization.⁵ The party of the first part was Oakes Ames, who then held the contract, and who assigned it to the party of the second part. Seven trustees constituted the party of the second part, and they bound themselves to carry out the contract according to its terms, and to distribute the profits thereupon among those stockholders of the Credit Mobilier who should execute to them an irrevocable proxy on at least six-tenths of any Union Pacific stock which they then owned, or which they in future might own. This power to vote a majority of the Union Pacific stock insured the trustees against the election of a Union Pacific board hostile to the interests of the Credit Mobilier. The men named as trustees were Oliver Ames, T. C. Durant, J. B. Alley, Sidney Dillon, C. S. Bushnell, H. S. McComb, and Benjamin E. Bates. The party of the third part was the Credit Mobilier, which guaranteed the carrying out of the contract and bound itself to loan the trustees what funds

¹ *Affairs of the Union Pacific Railroad Company*, p. 493.

² *Ibid.*, p. 405.

³ *Ibid.*, p. 5.

⁴ *Ibid.*, part 2. pp. 13-16.

⁵ *Ibid.*, p. 684.

they needed, receiving therefor 7 per cent. interest and $2\frac{1}{2}$ per cent. commission.

Noteworthy changes in the standing of the Union Pacific enterprise had taken place since 1864. Then the Credit Mobilier had to be secured in order to limit liability and get enough capital to continue construction. In 1868 there was no difficulty in getting capital to take hold of the Ames contract. The proxies which were required, and which were readily given to the trustees, were so worded that they made each stockholder of the Credit Mobilier a partner in the enterprise—just what the Credit Mobilier had been made use of to avoid—and the trustees went to work with \$50,000,000 back of them. Until the connection of the Credit Mobilier with the Ames contract was known, the stock of that corporation had never had a market value. Then it immediately went far above par, and what few sales were made were at fancy figures like 260.

As has already been said, the Credit Mobilier continued to build the road beyond the one-hundredth meridian, where its contract ceased, knowing that proper credit for its work would be given when the final contract was let. We have seen that when Ames's proposal was made, 188 miles had already been built. By the time he assigned the contract to the trustees, 50 miles more had been finished.¹ This first part of the work embraced under the Ames contract was not expensive, and what was to be paid for it was some \$2,500,000 or \$3,000,000 in excess of its cost to the builder.² So the trustees, with this sum in hand, made haste to carry out their obligations.

As Ames did not wish to extend his contract beyond the 667 miles which it originally covered,³ Durant, to avoid delay, made a contract in November 1868, with James W. Davis, a sub-contractor, to build the remainder of the road. The Davis contract took the Ames contract as its basis, and an accompanying agreement provided for its assignment to the same trustees who executed the Ames contract. A resolution of the board of directors

¹ *Affairs of the Union Pacific Railroad Company*, p. 114.

² *Ibid.*

³ *Ibid.*, p. 4.

of the Union Pacific approved Durant's action, and a committee was appointed to obtain the necessary consent of the Union Pacific stockholders.² Thus without any change of machinery the work went on.

Construction on the western part of the road was pushed with unprecedented vigor, winter not being allowed to stop work. There were several reasons for this haste. Public opinion, which the government directors voiced, urged it.³ To put capital into the road and postpone its productiveness by not opening it to traffic until 1875, the limit set by the Act of 1864, would have crushed the company under the accumulation of interest. The Salt Lake business and a "governing point" for the traffic of that region was a prize to be gained only by rapid work.³ Late in the construction period the desire to meet the Central Pacific as far west as possible became a motive. So the work was done with marvelous speed. Four or five miles of track were laid per day, and items of expense which should have been \$600 per mile were made \$1500 instead.⁴ By such methods the Union Pacific and the Central Pacific were joined May 10, 1869.⁵

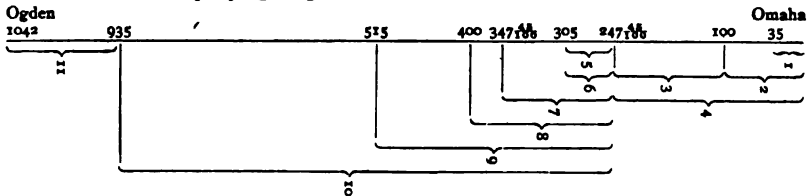
² *Affairs of the Union Pacific Railroad Company*, p. 17.

³ *Ibid.*, p. 563.

³ *Ibid.*, p. 664.

⁴ *Ibid.*, p. 510.

⁵ The facts of the construction period thus far related may be brought together by the aid of the accompanying diagram :



1. Built by Union Pacific Company, largely with Durant's money.
2. Hoxie Contract.
3. Hoxie Contract extension.
4. Assigned to Credit Mobilier.
5. Built by Credit Mobilier.
6. First proposed extension to Hoxie Contract.
7. Proposed Hoxie Contract extension, coupled with purchase of \$6,000,000 of securities.
8. Boomer Contract.
9. I. Williams Contract of March 1, 1867.
10. II. Williams Contract of June 24, 1867.
10. Ames Contract.
11. Davis Contract.

This saving of six years of the time allowed by the law for completing the road doubled the cost to the builders. By increasing the working force the chance of accidental delays was increased, and the costliness of such delays likewise increased. Just before the Ames contract was let, the Union Pacific was obliged to borrow money in New York to use on the road, for which it paid 18 or 19 per cent.¹ By pushing the road out beyond the bounds of civilization and not waiting for the slower pace of the settler, it often became necessary for one-half the force to stand guard while the other half worked.² Hundreds of workmen were killed by the Indians.³

Thus far the managers of the enterprise were responsible for the increased cost; they could have avoided it by adopting a different policy. But there were other items of needless cost which they could not avoid. For these the government alone was to blame.

The requirement that only American iron be used on the road increased the cost \$10 for every ton of rails laid.⁴ An incident, typical rather than intrinsically important, is that of two government directors who insisted that a cut should be made through each rise in the Laramie plains, giving the track a dead level, instead of conforming it to the profile of the ground. As snow blockades made it necessary to refill these cuts later, there was a waste of from \$5,000,000 to \$10,000,000. At the crossing of the North Platte, machine shops were called for which cost perhaps \$300,000. To the company they were not worth three cents.⁵ Another of a worse sort concerned a government commissioner, Cornelius Wendell, appointed to examine the road and report whether or not it met the requirements of the law, who flatly demanded \$25,000 before he would proceed to perform his duty. As a considerable section of road awaited acceptance, and as acceptance must precede the drawing of subsidies, his

¹ *Affairs of the Union Pacific Railroad Company*, p. 252.

² *Ibid.*, p. 431.

³ *Ibid.*, p. 494.

⁴ *Credit Mobilier Investigation*, p. 255.

⁵ *Affairs of the Union Pacific Railroad Company*, p. 432.

demand was paid in the same spirit in which it was made—as just so much blood-money.¹ Such results were bound to follow when the government made its power to appoint commissioners a means of distributing political patronage.²

As steps toward answering the question, What did the building of the Union Pacific yield as profit? the capitalization and the cost must be considered.

The property, at the close of the period of construction, stood burdened with four kinds of bonds—United States bonds, its own first-mortgage bonds, land-grant bonds, and income bonds. Of the government bonds there were issued the full quota—\$27,266,512 on 1038.68 miles of road.³ The aggregate of first-mortgage bonds was slightly less than this sum, \$27,213,000.⁴ Of land-grant bonds there were outstanding \$10,400,000, and of income bonds, \$9,355,000. Thus the total indebtedness represented by the four kinds of bonds was \$74,204,512.

The stock of the road subscribed for when organization was effected was slightly in excess of the \$2,000,000 required,⁵ and was owned in various quarters. As early as December 1, 1864, the Credit Mobilier began to buy in these shares, and succeeded in acquiring almost all of them.⁶ By the time the Ames contract was let, the \$2,000,000 had increased to about \$5,000,000.⁷ Under the Ames and Davis contracts the trustees subscribed, at various times as the work proceeded, according to the terms of those contracts, for \$30,096,000 of stock,⁸ and when the road was done the stock issued was \$36,762,300. Thus the total capitalization of the road was \$110,966,812.

But this sum does not represent the cost of the road. From the books of the Union Pacific and the Credit Mobilier, it appears that the expenditures by the Union Pacific directly amounted to \$9,746,683.33; and that the actual expenditures under the Hoxie,

¹ *Affairs of the Union Pacific Railroad Company*, p. 471.

² *Ibid.*, p. 431.

³ *Ibid.*, p. 738.

⁴ *Ibid.*, p. 590.

⁵ *Ibid.*, p. 599.

⁶ *Ibid.*, p. 20.

⁷ *Ibid.*, p. 72.

⁸ *Ibid.*, p. 642.

Ames, and Davis contracts were \$50,720,957.94, making the total cost of the road \$60,467,641.27.¹

This should be compared with the sum received for bonds, which is shown by the following table:²

First-mortgage bonds.....	\$27,213,000.00	
Loss on same.....	3,494,991.23	
		\$23,718,008.77
Land-grant bonds.....	10,400,000.00	
Loss on same.....	4,336,007.96	
		6,063,992.04
Government bonds.....	27,236,512.00	
Loss on same.....	91,348.72	
		27,145,163.28
Income bonds.....	9,355,000.00	
Loss on same.....	2,818,400.00	
		6,536,600.00
Total.....		\$63,463,764.09
Cost of road.....		60,467,641.27
Excess of receipts from bonds over cost of road..		\$ 2,993,122.82

There must be added to this sum, in order to get the cash profit on building the road, the amount which was paid to the Union Pacific by the Central Pacific for the section of road lying between Promontory, which had been settled upon as the meeting place of the two roads, and the point which is now the end of the Union Pacific, some four or five miles west of Ogden.³ For this transfer of the ownership of some fifty miles of road the

¹ The figures upon which this estimate is based were compiled by Mr. Benjamin F. Ham, who was Assistant Secretary and Treasurer of the Credit Mobilier during most of the period of its active existence.—*Affairs of the Union Pacific Railroad Company*, p. 371.

² *Ibid.*, p. 590.

³ Those provisions of the chartering acts which were intended to spur the eastern and the western companies to rapid building, in competition for the subsidies offered, worked only too well. Instead of bringing the ends of the road together as soon as possible, the two construction parties passed within sight of each other, and graded two parallel lines. The Central Pacific went almost to Ogden and the Union Pacific to Humboldt—points 170 miles apart—before a compromise was effected. The terms of the compromise are indicated in the text.—*Affairs of the Union Pacific Railroad Company*, p. 11.

Union Pacific received the sum of \$2,698,620. This makes the cash profit on the enterprise \$5,691,742.82.

Then, in order to ascertain the total profit on construction, there must be added the value of the whole amount of stock issued. But what that value is cannot be said. The leading men of the enterprise seemed unanimous in the opinion that a fair valuation was 30. But Union Pacific stock has certainly been above that point repeatedly, and it was down at one time to 9. It has always been a speculative stock, the sales amounting in a year to several times the total amount outstanding. But, for the sake of getting an estimate of the profits made by the builders of the Union Pacific, even though that estimate be admittedly unreliable, the valuation given above may be taken. At 30, the \$36,762,300 of stock would be worth \$11,028,690. Adding this to the cash profit as stated above, the total profit appears to be \$16,710,432.82, or slightly above $27\frac{1}{2}$ per cent. of the cost of the road. Considering the character of the undertaking and the time when it was carried through, this does not seem an immoderate profit.

CHAPTER IV.

HISTORY OF THE BRANCH ROADS.

While the Union Pacific was filling with settlers a strip of country stretching westward from Omaha, the other roads provided for in the charter acts were doing the same for other regions. The early history of these related enterprises must be traced as a basis for an understanding of their future relations.¹ The most important of these branch roads is the Kansas Pacific, the one spoken of in the chapter on the charter acts as the Kansas branch.

¹ Here, as well as anywhere else, may be given the few facts necessary to an understanding of the situation concerning the line which, in the Act of 1862, it was proposed should run from Sioux City to join the Union Pacific at the one-hundredth meridian. It was known as the Sioux City and Pacific.

To cross the Missouri immediately and proceed in a southwesterly direction, would have given the whole land grant in Nebraska. There were more valuable lands in western Iowa, so the projectors of the road chose a course slightly east of south from Sioux City, and crossed the Missouri at a point only a little way above Omaha. The junction with the Union Pacific was at Fremont, a small town lying a short distance west of Omaha. Besides securing a more valuable land grant than it otherwise would have had, the company thus got a location where it would have a more lucrative traffic.

John I. Blair and Oakes Ames were the leading men of the construction period, and their profits cannot be learned. The subsequent financial history of the road was unsatisfactory, but its location made the line valuable to the Chicago and North-Western, and in 1884 a controlling interest in the stock was bought by that company, of which it has since been an appendage. The Sioux City and Pacific has never been a part of the Union Pacific system, so it calls for no further attention.

The Central Pacific, although it is not a part of the system whose history this work attempts to trace, is so closely related to the Union Pacific, both in origin and commercially, that space may be spared for the merest outline of its history.

The Central Pacific Railroad Company was organized under California state law in 1861. It formally accepted the terms offered to it by the Act of 1862, and work upon the road began January 8, 1863. The completion of the task was of course simultaneous with the completion of the Union Pacific — May 10, 1869.

The company was organized by a circle of Sacramento merchants — Collis P. Huntington, Leland Stanford, Mark Hopkins, and Charles Crocker. A few other

In 1861¹ the territorial legislature of Kansas granted a charter to the Leavenworth, Pawnee and Western Railroad Company. At that time it was not uncommon for charters to be obtained before plans for using them were fully matured. This was a case of that kind, and consequently the charter was for some time unused. The scheme of this corporation was, in its inception, to build a road only from Leavenworth to Lawrence. By a treaty with the Delaware Indians some 225,000 acres of land lying some six miles from Leavenworth were bought, and then, as the enterprise was found to be too small to attract the attention of capitalists, a treaty with the Pottawatamie Indians was made which secured an additional right, that of purchasing at \$1.25 per acre a tract of land which lay northwest of Topeka, containing 550,000 acres more. This right, however, was never parties at times had minor interests in the enterprise. Having once taken hold of the task of building the road, these men stood by it to the fullest extent and put it through, never disposing of the stock which came into their hands. The physical difficulties to be overcome were much greater on the Central Pacific than on the Union Pacific—heavier grades, long stretches of snow-sheds through the mountains, etc., being required. As the Union Pacific profited by the unexpected finding of an easier route, so the Central Pacific found an unexpected resource in Chinese cheap labor, without which the road probably could not have been built.

The construction company device which was used by the Central Pacific people was called the Contract and Finance Company, and was similar in organization to the Credit Mobilier. The number of men concerned being smaller, and the system of bookkeeping being even worse than the bad one employed by the Credit Mobilier, the history of the construction period of the Central Pacific cannot be given. But at any rate, the men who took the stupendous risks of that time got all the profits.

The same men who composed the Central Pacific Company also made up the Southern Pacific Company. The road of the latter runs southeast from San Francisco to New Orleans, and thence has one line of steamers to Florida and another to New York. The real connection between the Central Pacific and the Southern Pacific is very simple—identity of ownership. The nominal connection has been in various deceptive forms. The Southern Pacific company is a Kentucky corporation, with ill-defined and almost unlimited powers. Sometimes the Central Pacific has leased the Southern Pacific line; now the Southern Pacific holds a lease of the Central Pacific line. Naturally it is to the interest of the owners of these systems to send Coast traffic over the Southern Pacific in preference to sending it over the Central Pacific and the Union Pacific, as they thus secure a longer haul. How the Union Pacific tried to recoup itself for the traffic which was lost to it when the Southern Pacific line was built, will appear later.

¹ H. V. and H. W. Poor, *Manual of Railroads*, 1877-78.

exercised and these lands were subsequently sold for \$1.00 per acre to parties interested in the Santa Fé Company.¹ The project still being considered too insignificant, it was determined to connect it with a Pacific railway scheme, and thus attract the attention of the whole country. The parties interested, therefore, drew up and pushed in Congress one of the early Pacific railway bills.²

In 1863 the name of the company was changed from the Leavenworth, Pawnee and Western to the Union Pacific (Eastern Division). In May 1863, John C. Fremont and Samuel Hallett began making a series of payments which in October amounted to \$203,000 and gave them possession of the franchises and the lands of the company. Of this latter asset there were supposed to be over 2,000,000 acres.³ Under the early owners there had been little or no construction. Under Fremont and Hallett a contract was let to a Canadian firm, but no work was done under it.⁴ Its owners becoming estranged in 1864, the property was, in December of that year, turned over to a new set of men, the price being about the same sum that was paid at its previous transfer.⁵ Under this management the road was built.

The Eastern Division people, doubting that the Union Pacific Company would ever build their road as originally planned, were instrumental in having inserted in the Act of July 2, 1864, a section⁶ which provided that, if the line from Omaha had not been constructed when the Eastern Division reached the point of the proposed junction at the one-hundredth meridian, the latter might proceed to build westward on the proposed route of the Union Pacific and receive the subsidy for such building. This fact is interesting when considered in connection with the Act of July 3, 1866.⁷ In this is found evidence of a change in plan. It allowed the Eastern Division to run west instead of northwest, releasing it from the necessity of joining the Union

¹ *Pacific Railway Commission*, p. 1673.

² *Ibid.*, p. 1596.

³ *Ibid.*, p. 3846.

⁴ *Ibid.*

⁵ *Ibid.*, p. 3847.

⁶ Sec. 12, see page 113 below.

⁷ 14 *Statutes at Large*, 79.

Pacific at the one-hundredth meridian. Under this authority the old route up the Republican fork of the Kaw was abandoned, and a new one following the Smoky Hill branch was adopted, the point of divergence from the original route being Fort Riley. It was undoubtedly the intention of the Eastern Division people to extend their road southwest from Denver, through New Mexico and Arizona and on to the southern part of California. They would thus have had a competitor of the Union Pacific, instead of a branch of it. This plan, however, was frustrated by the insertion in the Act of 1866 of the unwelcome provision that the Eastern Division must join the Union Pacific at a point not more than fifty miles west of the meridian of Denver.

The subsidy was claimed on the first completed section of forty miles in October 1865. A year later 130 miles were done; by the end of 1868 about 400 miles were ready for operation, and the fall of 1870 saw the line opened for traffic to Denver.¹

Meanwhile an Act of Congress of March 3, 1869,² had authorized the Eastern Division to contract with the Denver Pacific Company for the building of the road from Denver to Cheyenne, and there was transferred to that company the franchise, land grant, and all other privileges for that part of the road. On the same day both houses of Congress passed a joint resolution allowing the name to be changed from Union Pacific (Eastern Division) to Kansas Pacific.³ For the sake of simplicity the road will be referred to hereafter by this name, without regard to what may have been its legal title at the time spoken of.

The Act of July 3, 1866, while it allowed the Kansas Pacific to adopt a new route, provided that no more United States bonds should be issued for it than would have accrued to it if it had followed the original route. The distance necessary to effect the proposed junction with the Union Pacific was determined to

¹H. V. and H. W. Poor, *Manual of Railroads*, 1877-78.

²15 *Statutes at Large*, 324.

³15 *Statutes at Large*, 348.

be $393\frac{1}{8}$ miles, and for so much only of the road were bonds issued. This is important because the mortgage of the government covers only those parts of the system which were built by the aid of the bond subsidy. The land grant, however, extends the whole length of both the Kansas Pacific and the Denver Pacific lines.

The contracts for constructing the Kansas Pacific road were let to several firms under whose various names a ring of the stockholders, with perhaps slight variations of membership, operated. R. M. Shoemaker and Co. had the contract for building the main line to the one hundred and fortieth milestone; Shoemaker, Miller and Co. for the remaining bond-subsidized portion. On the day of making the first of these contracts there was a payment to John D. Perry and Co. of \$1,136,601.15 for the amount expended on the road. No contract with this company can be found, but as Perry and others who were interested in this company were also interested in both the others, it may perhaps properly be inferred that this company does not differ widely in make-up from the other two. Unfortunately, the books of these companies are not forthcoming, and therefore details of the construction period are scanty.

The bookkeeping of the builders of the Union Pacific was bad, but that of the builders of the Kansas Pacific was much worse. While in the case of the former it was possible to give not only the cost of the road to the railway company but also its cost to the contractors who built it, in the case of the Kansas Pacific only the cost to the Kansas Pacific Company can be given.

Under the contract of R. M. Shoemaker and Co.¹ the first 140 miles west of the Missouri River cost \$10,172,179.21, or \$72,-658.42 per mile.² Payment was made in capital stock and cash in equal parts.³ For the remainder of the bond-subsidized portion, *i. e.*, $253\frac{1}{8}$ miles, Shoemaker, Miller and Co. received \$16,-232,812.62, or \$61,225.90 per mile. The contract called for all the United States bonds, *i. e.*, \$16,000 per mile; all the first-

¹ *Pacific Railway Commission*, p. 4864.

² *Ibid.*, p. 4945.

³ *Ibid.*, p. 4865.

mortgage bonds — an equal amount; \$10,000 per mile in income bonds; and \$8,000 per mile in capital stock; and in addition a lump sum of \$600,000 in capital stock and \$400,000 in income bonds. In consideration of these sums the construction company was not only bound to build the road, but it was also bound to pay all the debts of the company unfunded at the time of the termination of the contract. These were estimated at \$450,000, and \$500,000 was set as the limit to such payment.² The remaining portion of the road, upon which there was no bond subsidy but simply a land subsidy, is 234 miles long, and is known as the Denver Extension. Its cost was \$7,952,498.83, or \$33,985.04 per mile. The total cost, then, of the 639.4³ miles of road from Kansas City to Denver was \$34,357,490.66.

The funds to pay the construction accounts came from the sale of the following securities: stock, \$10,000,000;⁴ first-mortgage bonds, \$16,000 per mile for 393 $\frac{1}{2}$ miles, amounting to \$6,303,000;⁵ the United States bonds which represented a second mortgage on the same part of the road, also amounting to \$6,303,000; first-mortgage bonds on the Denver Extension, \$6,500,000;⁶ a mortgage upon the Leavenworth branch,⁷ \$600,000;⁸ an income mortgage of \$4,186,000;⁹ and a land-grant mortgage of \$500,000.⁹ The total face value of these securities was thus \$34,392,000, or \$34,509.34 more than the cost of the road as given above.

The extravagant policy of the builders of the Kansas Pacific kept the financial conduct of the enterprise unsatisfactory long after the road was completed. In 1867 the net earnings of the road were \$190,571.56, but the interest on the bonded indebtedness which had already been contracted was \$467,642.97. In

² *Pacific Railway Commission*, pp. 4867-9.

³ *Ibid.*, p. 4440.

⁴ *Ibid.*, p. 119.

⁵ *Ibid.*, p. 4923.

⁵ *Ibid.*, p. 122.

⁶ The short line of 31.6 miles connecting Leavenworth and Lawrence, upon which no subsidy was given.—*Ibid.*, p. 4902.

⁷ *Pacific Railway Commission*, p. 122.

⁸ *Ibid.*, p. 4902.

⁹ Issued in 1866 and canceled later.—*Pacific Railway Commission*, pp. 4907-4911.

1868 the net earnings were more than doubled, \$495,230.61, while the interest account had fallen to \$364,371.03. This was the only year in the history of the road as an independent organization when the net earnings equaled the interest on the bonded indebtedness. In 1869 the net earnings were \$437,163.70, and the interest \$497,246.77. In 1870 the interest account had swelled to \$1,005,935.51, and instead of net earnings there was a deficit of \$790,689.21. This, it will be remembered, was the year when the road was built through to its western terminus, Denver. The result of this deficit was a land-grant mortgage¹ for \$2,000,000.² During the next year there was some improvement, but the net earnings of \$264,033.87 were still far short of the amount of the bonded interest, \$1,055,358.70. A second mortgage was therefore issued on the land pledged the year before, for the sum of \$1,500,000.³ The following years showed no improvement in the affairs of the company, and in 1874⁴ another small loan was raised on land security. In October 1876,⁵ there was issued a funding mortgage, covering the whole line,⁶ for \$1,500,000,⁷ with 10 per cent. interest. A schedule of securities was placed in the hands of the trustees of this mortgage, among them a controlling interest in the stock of the Denver Pacific. In 1873 there had been a default on its interest obligations by the Kansas Pacific, and in November, 1876,⁸ a bill of foreclosure was filed. This put in jeopardy the control of the Denver Pacific, a majority of its stock being in the hands of the trustees of the funding mortgage of 1876. A large majority of the bonds upon which there was default had been sold abroad, chiefly at Amsterdam and Frankfort. The president of the Kansas Pacific therefore went to Europe, called a meeting of the holders of the various sorts of bonds, and showed them the necessity of keeping the control of the Denver Pacific. The result was a

¹ *Pacific Railway Commission*, p. 130.

² *Ibid.*, p. 4431.

³ *Ibid.*, p. 130.

⁷ This was to pay off the floating debt which had accumulated previous to the receivership.—*Pacific Railway Commission*, p. 4895.

⁸ *Ibid.*, p. 135.

⁴ *Ibid.*, p. 130.

⁵ *Ibid.*, p. 131.

⁶ *Ibid.*, p. 4431.

funding agreement by which there were surrendered matured coupons and some which were yet to mature, instead of which there were received what were called **Baby Bonds**. In case of default on these, the management of the road was to be surrendered to two receivers, one of whom should represent the bondholders, the other the junior securities—the railroad directors' party.¹

A new era in the badly entangled affairs of the Kansas Pacific was about to begin, but before going on to that it may be well to turn aside to consider briefly the Denver Pacific. This was, as has been intimated, an appendage, and practically an asset of the Kansas Pacific, and its affairs can be very quickly disposed of.

The Act of March 3, 1869, referred to above, having freed the Kansas Pacific from the necessity of building directly that part of the line lying between Denver and Cheyenne, where it was proposed to connect the Kansas Pacific line with the Union Pacific, the construction of this link was placed in the hands of an independent company. The most prominent man connected with this, the Denver Pacific Company,² was John Evans, at one time governor of Colorado and long connected with railway enterprises in the West. The details of the construction period cannot be given, as those of the books which are not lost are in a very fragmentary condition. At the completion of the road, January 1, 1871,³ the capitalization was \$2,500,000 in first-mortgage bonds and \$4,000,000 in stock.⁴

The Denver Pacific was a separate corporation for ten years, and for three only of the ten did the net earnings exceed the interest on the bonded indebtedness. In 1878 there was default on payment, and in April of that year the road went into the

¹ *Pacific Railway Commission*, p. 133. The scheme also provided for a temporary issue of securities, to the amount of \$500,000, the last of which were redeemed and canceled in 1876.—*Ibid.*, p. 4895.

² Incorporated in 1867 by the territorial legislature of Colorado.—*Pacific Railway Commission*, p. 4951.

³ H. V. and H. W. Poor, *Manual of Railroads*, 1887, p. 839.

⁴ *Pacific Railway Commission*, p. 4987.

hands of receivers, where it remained until its separate existence ceased.¹

To return to the Kansas Pacific. It was early in 1878 that Jay Gould first became interested in that enterprise, and he straightway set about an attempt to do something which had been talked about as early as 1875²—harmonizing the managements of the Kansas Pacific and of the Union Pacific. The hostility between the two roads had been detrimental to both. In fact, the Kansas Pacific assigned as the cause of its bad financial condition the refusal of the Union Pacific to prorate its traffic westward from Cheyenne. The right to prorate was claimed by the Kansas Pacific under the Act of 1862,³ which provided that the various Pacific roads should be operated as one system. The reply of the Union Pacific sufficiently showed the injustice of the demand, even if it did not meet the legal aspect of the controversy. It was this: That the portion of the Union Pacific lying west of Cheyenne was far more expensive, both as to building and as to maintenance, than either the Kansas Pacific or the line from Omaha to Cheyenne. It would be no more than just, then, to charge more for hauling freight through the mountains than for hauling it over the plains. But a wholly sufficient cause for the financial misfortunes of the Kansas Pacific was found in its too great capitalization.

¹ The financial history of the road is indicated by the following figures :

	Receipts from traffic	Traffic expenditures	Net earnings	Bonded Ind. (No Gov't Subsidy)
1870.....	\$304,738.23	\$197,518.42	\$107,219.81	\$138,535.25
1871.....	339,145.45	242,015.98	97,129.47	197,623.24
1872.....	366,570.42	169,191.95	197,378.47	197,432.52
1873.....	362,378.22	146,565.29	215,812.93	202,297.66
1874.....	381,149.77	138,303.69	242,846.08	187,335.22
1875.....	374,229.69	139,246.00	234,983.69	196,680.96
1876.....	352,019.27	246,852.94	105,116.33	188,353.96
1877.....	317,761.05	186,644.90	131,116.15	175,644.65
1878.....	187,022.71	137,820.35	49,193.36	
1879.....	137,126.56	105,308.68	31,817.88	
	\$3,122,141.37	\$1,709,477.20	\$1,412,664.17	\$1,483,903.46

Pacific Railway Commission, pp. 4987, 4991

² *Pacific Railway Commission*, p. 450.

³ Sec. 12. See Appendix, p. 107.

The plan by which Gould hoped to quiet the dissensions of the two roads was embodied in the Kansas Pacific Pool Agreement, signed April 24, 1878. By this agreement twelve large holders of Kansas Pacific securities bound themselves to do certain things; viz., to unite in interest the Kansas Pacific and the Union Pacific so that they should be operated as one road; to provide for the reorganization of the Kansas Pacific on a sound basis; to secure the payment of its bonds; and to apportion the new stock which should be issued, according to the holdings of the various subscribers to the agreement. A schedule of rates was fixed at which securities might be put into the pool, for which securities the managers of the pool would issue certificates to the owners.¹

If this plan had been executed there would have resulted a company with no lien on its property except the first mortgage over its whole length, the government lien on part of it, and \$4,800,000 of stock. But to be successful it was necessary that all the securities outstanding should come into the pool. If part only were canceled, the rest would be thereby made more valuable.² In order, therefore, to attract outside holders, the pool prices were made somewhat higher than the market rates.³ But still some holders of securities refused to come in, and it soon became evident that the scheme would not work.

There was then perfected the plan of the consolidated mortgage which bears the date of May, 1879.⁴ Its objects were to get a uniform security and to make a saving in interest.⁵ Of

¹ *Pacific Railway Commission*, p. 162. At that time the funded debt of the Kansas Pacific was \$27,727,350.00, most of it bearing 7 per cent. interest, some of it 6 per cent., and some 10 per cent. The annual interest charge was \$1,892,134.50.—*Ibid.*, p. 496.

² *Pacific Railway Commission*, p. 455.

³ *Ibid.*, p. 454.

⁴ *Ibid.*, p. 455.

⁵ The exchange was made as follows:

Denver Pacific bonds at par.....	\$1,605,000
Boulder Valley Railroad bonds, \$438,000, for....	436,000
Income bonds, stamped.....	\$2,907,450 for \$2,070,431.41
“ “ unstamped.....	137,500 “ 118,314.86
	<hr/>
	\$2,188,746.27

these new bonds there were issued \$8,457,000, retiring various obligations with higher rates of interest. The good effect of the Gould management was soon evident in the income of the company, and the harmony existing between the two roads which had so long been hostile was so complete that it would seem that any further unification of their interests was unnecessary, until it is remembered that this harmony existed only so long as one man willed it to exist.

There remains to be given the history of the least important of the Pacific railways provided for in the Act of 1862—the Central Branch Union Pacific. Notwithstanding its lack of importance, this road had perhaps the most picturesque experiences of any of the group.

Chartered by an act of the territorial legislature of Kansas which was approved February 11, 1859, under the title of the Atchison and Pike's Peak Railroad Company, it secured, on January 1, 1864, the rights granted by the Act of 1862 to the Hannibal and St. Joseph. That is, it was allowed to build a road westward from St. Joseph by way of Atchison to connect with the Kansas Pacific, and to receive for not more than one hundred miles of its length the same subsidies given to the other Pacific railways. The name was changed to the Central Branch Union Pacific on January 1, 1867.

	Brought forward, \$2,188,746.27	
Funding Mortgage bonds.....	\$1,167,000	\$942,305.60
Second Mortgage, Land Grant bonds.....	1,005,000	827,103.60
First Mortgage, Land Grant bonds.....	8,000	8,000.00
Leavenworth Branch bonds.....	108,000	86,730.00
Solomon Road bonds.....	40,000	40,000.00
National Land Company stock.....	1,000	1,000.00
Arkansas Valley Railway bonds.....	454,000	323,883.60
		<hr/>
		\$4,417,769.07
Less for fractions.....		1,769.07
		<hr/>
		\$4,416,000
In settlement with Jay Gould, \$2,000,000 at 75..		1,500,000
For discount on Gould's \$2,000,000 at 25.....		500,000
		<hr/>
Total.....		\$8,457,000

March 27, 1865, the company authorized the issue of \$1,600,000 of first-mortgage bonds on its property and franchise, with the intention of using the proceeds in construction. May 9 of the same year a contract for building and equipping the road was given to William Osborn,¹ who divided it into sixty-four parts and assigned to various parties all but four of these parts. This contract called for the payment of practically all the assets of the road—an exhaustive contract.² At a later date Osborn's share was bought up and, the others consenting, the contract was canceled.

From March 1866 on, the sale of bonds proceeded, and, together with the sale of stock options, furnished the bulk of the funds for building the road. The subsidy bonds for the first completed section of twenty miles were issued August 2, 1866. Those for the fifth and last section were issued January 24, 1868.³ Although this last issue of bonds indicates that a United States commissioner had, in January, 1868, examined the last twenty miles of road and sworn that it fulfilled the requirements of the law, it was not until September 8, 1868, that the contractor wrote announcing the completion of the road.⁴

The books of the contractor show that the cost of the road was as follows :

Construction	\$2,306,430.42
Equipment.....	243,924.52
	<hr/>
	\$2,550,344.94 ⁵
Subsequent bills for construction and equipment	181,002.29
	<hr/>
	\$2,731,347.23

To meet this charge the funds were obtained as follows :

For \$1,600,000 United States bonds.....	\$1,577,651.55
For stock options.....	392,225.53
For \$1,600,000 first-mortgage bonds.....	567,612.14
	<hr/>
	\$2,537,489.22

¹ *Pacific Railway Commission*, p. 5303.

³ *Ibid.*, p. 5303.

² *Ibid.*, p. 4091.

⁴ *Ibid.*, p. 5304.

⁵ Note mistake in addition.

Of this latter sum \$491,612.14 was received in cash, and \$76,000 in services and credits on accounts. There were 842 bonds disposed of without any clear account being rendered. They are entered under the headings "compensation," "donation," "existing liabilities," etc.¹

When the Kansas Pacific turned westward from Fort Riley to go to Denver, instead of to its proposed junction with the Union Pacific at the one-hundredth meridian, the Central Branch found its plans badly upset. It thus became a spur running out into the midst of the prairie, with no western connections. But sound lawyers said that the Act of July 3, 1866, could not be construed so as to deprive the Central Branch of its right, under the Act of 1864, to continue its road up the old route of the Kansas Pacific to a junction with the Union Pacific.² Others would only go so far as to say that this action of the Kansas Pacific which Congress had sanctioned gave the Central Branch a strong equitable claim on Congress for remedial legislation. Senator Fessenden, of Maine, who had up to this time been an opponent of the Pacific railway subsidies, recognized the force of this reasoning so that he approved the action of the company in pressing its claim. A bill was introduced to declare that the rights of the Central Branch were in no way affected by the act allowing the Kansas Pacific to follow the Smoky Hill fork of the Kaw. This was opposed by the Kansas Pacific, and narrowly defeated in the Senate.³ But the claim was pressed before the executive branch of the government, and the company was finally allowed to file a map for the extension of the road to a junction with the Union Pacific. President Grant signed this map, and the matter seemed to be settled. Later, however, certain men whose inspiration seems to have been drawn from Wall street convinced the president that his previous action in signing the map had been urged upon him by those who wished to manipulate the stock market, and, to avoid being used as the tool of speculators, he, in Janu-

¹ *Pacific Railway Commission*, p. 5331.

² *Ibid.*, pp. 4144-6.

³ *Ibid.*, p. 4093.

ary 1873, sent to the Department of the Interior for the map and tore off his signature.¹ It was attempted for several years to get redress for this ill-advised action, but without success.

The Central Branch having lost the advantage which it was expected would accrue to it through connection with the Pacific railway system, the policy was developed of encouraging the building of numerous short lines into the country lying west of the subsidized portion, for the sake of developing local traffic.²

In 1877 Oliver Ames began to take an active interest in the affairs of the Central Branch.³ He had inherited from his father, Oakes Ames, 666 shares of stock and 27 bonds. In 1878 and 1879 he increased his holdings by purchases of stock at prices varying from 50 or less up to 160.

In the fall of 1879 negotiations were begun for the sale of the property to Jay Gould, who then controlled the Kansas Pacific. Ames, having a strong financial circle back of him, was pushing construction forward with the avowed intention of going to Denver. Gould, who claimed this territory for the Kansas Pacific, was building a parallel line so near to the Central Branch that they at times disputed the right of way. At the same time Ames was negotiating for a sale of his line to the Chicago, Burlington and Quincy, was communicating with Garrison of the Missouri Pacific, and had some talk with Palmer of the Chicago, Rock Island and Pacific. He was offering his stock at \$300 per share. Finally he offered Gould five-eighths of the amount outstanding, \$1,000,000, at \$250, and the offer was accepted.⁴

¹ *Pacific Railway Commission*, p. 4096.

² The first of these roads was the Waterville and Washington, 20.69 miles in length, leased to the Central Branch December 15, 1876. The Republican Valley Railroad followed just a year later. The Atchison, Solomon Valley and Denver Railway was leased from August 20, 1878, and the Atchison, Republican Valley and Pacific on January 1, 1879. These roads, with the Atchison and Denver, were consolidated under the name of the Atchison, Colorado and Pacific Railroad, and December 27, 1879, were leased to the Central Branch for 25 years, the Central Branch agreeing to pay an annual rental of \$1000 per mile and keep the roads in repair. On the same day the Atchison, Jewell County and Western also was leased on the same terms.

³ *Pacific Railway Commission*, p. 802.

⁴ *Ibid.*, p. 807.

Straightway, November 7, 1879, the bargain was put on paper, Gould agreeing to pay in equal amounts of Union Pacific collateral trust bonds and of Kansas Pacific consolidated mortgage bonds. On this day Ames owned but 2890 shares, and he had agreed to deliver 6250 shares. November 11, 1879, Gould agreed to take in addition 1000 shares at \$200, and 1000 at \$175, payment to be made in Kansas Pacific consols.¹ On the 19th of the same month he gave Ames a thirty days' option to sell him the remaining 1620 shares or any part thereof at \$150.² Between November 11 and December 30, 1879, Ames turned over 6250 at \$250, 1000 shares at \$200, and 366 at \$175, receiving therefor \$1,826,500. Payment was made in Union Pacific 6's to the amount of \$913,500, and in Kansas Pacific 6's to the amount of \$913,000.³ Ames also delivered to Gould a majority of the stock of the Atchison, Colorado and Pacific, and of the Atchison, Jewell County and Western — 8443 shares in all.⁴ On January 24, 1880, Gould turned over this property to the Kansas Pacific, receiving therefor just what he gave and in the same kind of securities.⁵

Thus this little road, 100 miles in length, during the few years that it maintained a separate existence, went through various phases of interesting railway experience. It was built for profit, and run at a loss. It guaranteed the bonds of other roads, and was in default on the interest of its own. It leased a system of feeders with an aggregate mileage of more than twice its own length. While continuing to pile up deficits, and never having paid a dividend, its stock sold at 250 to the shrewdest railway manipulator of the age. Then it was dropped into the treasury of the Kansas Pacific, another road with a history made up of financial failures, remained there a few hours, and at last lost its identity by absorption into the reorganized Union Pacific Railway system.

Having reviewed the history of the building of each of the com-

¹ *Pacific Railway Commission*, p. 808.

² *Ibid.*, p. 526.

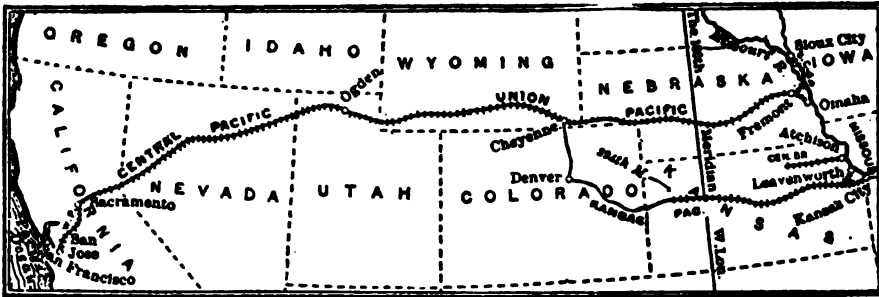
³ *Ibid.*, p. 524.

⁴ *Ibid.*, p. 809.

⁵ *Ibid.*, p. 527.

ponent parts of the Pacific railway system, it is now possible to look at the group as a whole. The plan laid down in the charter acts was shown by the map on page 14. It is interesting to compare that plan with the system as built, calling to mind the forces which effected the changes. The completed system is shown in the accompanying map :

PACIFIC R. R. SYSTEM, AIDED PORTION AS BUILT.



To him who studies the construction of the first Pacific railway in the light of present methods of railway building, the men who put through this great enterprise seem immeasurably extravagant if not corrupt. Those who suffered from their manipulations of the leading railway properties of the West are pretty sure to call them corrupt. But to him who looks at the railway history of the country as a whole, the building of the first railway to the Pacific appears as a mere episode, to be measured by quite different standards. Such an one will, of course, regret that extravagant and questionable methods were used, but he will not visit upon the managers of this work unqualified condemnation, as so many have done.

The construction of the earliest American railways was carried on with funds obtained by the sale of stock. Thus the control and the ownership of the roads were in the same hands, as they ought to be. Later it became evident that unfinished roads could be mortgaged to raise part of the funds for construction, and this policy was used with increasing frequency. At last the bonds were made to furnish almost the whole of the construction fund, and the stock was given to the bondholders as a mere

bonus. Property thus obtained was parted with readily, and it was possible to buy cheaply the control of a road and manage it as a speculation, to the detriment of the bondholders. This practice of separating ownership and management was highly unfortunate. A still worse development of railway policy came about the same time — the use of the construction company. This was in essence a limited liability corporation, formed by stockholders or others to secure the profits of building a road for the mortgage bondholders. The contracts for construction were made exhaustive, *i. e.*, all the possible resources of the road were given to the builders for their work; and the men who furnished the money found their property hopelessly loaded down with a debt upon which, in many cases, the interest could not be paid. This necessitated a reorganization, or successive reorganizations, in which investors suffered and speculators thrived.

At this stage in the development of American railway policy the government found itself in need of a railway to the Pacific. How the road would be built, if built then, was patent to all. The war was in progress, so the offer which was made was a war-times price. The first offer, of 1862, was not taken up; so a second was made two years later, doubling the first, and was accepted. It was a fair bargain, and the government got just what it bargained for. The proper thing to regret is not that this particular enterprise was carried through in an undesirable way, but rather it should be regretted that the American people should ever have adopted such industrial methods.

CHAPTER V.

INTERNAL HISTORY OF THE UNION PACIFIC, 1869-1895.

It has been seen that the stock of the Union Pacific was accepted by the men who built the road as the source of a very uncertain profit on the investment. Naturally it was from the beginning a speculative stock, and even as early as 1869¹ the notorious James Fisk made an unsuccessful attempt to control it. In 1872 Horace F. Clark and his friends bought a controlling interest at 30 or thereabouts, the plan being to throw the Union Pacific traffic over the Vanderbilt roads—Clark being Commodore Vanderbilt's son-in-law, and a director of the New York Central.

During the next year, at Clark's death, this stock was put on the market, and it chanced that an order of Jay Gould's to his brokers to buy what was offered at 35 or less, was given about the same time.² Gould thus came into possession of Clark's stock. Soon after this the price was depressed to 14, and Gould, in alarm, began to investigate. He found that there was an immense floating debt, carried at high rates of interest; \$10,000,000 of income bonds soon falling due; and various other unsatisfactory features of the situation. By giving to the task almost his whole time and instituting much-needed reforms, Gould succeeded, within three years, in placing the road on a dividend-paying basis,³ and during a period of less than five years thereafter the dividends paid amounted to \$11,942,125.⁴

This dividend-paying period was marred by the hostilities with the Kansas Pacific referred to on page 46, which led to the

¹ *Credit Mobilier Investigation*, p. 260.

² *Pacific Railway Commission*, p. 446.

³ *Ibid.*, p. 447.

⁴ *Ibid.*, p. 4810: In 1875 3½ per cent.
1876 8 per cent.
1877 8 per cent.

In 1878 7½ per cent.
1879 6 per cent.
Jan. 1880 1½ per cent.

talk of consolidating the two properties. This talk was significant only as foreshadowing the unification of interests which came a few years later.

Between 1873 and 1878 Gould increased his holding in Union Pacific stock from about 100,000 shares to double that amount, or five-ninths of the total issue.¹ During the next two years, however, he sold largely, thus surrendering his absolute control of the road. Attention has already been called to the fact that, in 1878, Gould took hold of the Kansas Pacific property,² and quieted the quarrels with the Union Pacific over the prorating of traffic. Gould's connection with the Central Branch has also been related.³ The significance of all these things will appear upon a study of the situation at the end of 1879.

Gould's sale of Union Pacific stock and his buying of Kansas Pacific indicates his estimate of the relative value of the two roads. The fact that the Union Pacific was a link in the only rail route across the continent had assured to it at once a place of importance in the commercial world and an immediate income. The importance of the Kansas Pacific came later, and Gould seems early to have recognized that importance.

By the summer of 1879 the physical condition of the Kansas Pacific had, under Gould's management, been greatly improved. The filling in of its territory with settlers had increased business and permitted the spending of money for the betterment of the property. During a recent trip abroad Gould had observed with admiration the compact, non-competing railway systems of England, and perhaps he was influenced by this to desire the consolidation of the Union Pacific and the Kansas Pacific.⁴ His chief interest was in the southern road, but the men of the Union Pacific agreed with him perfectly in this wish. Consolidation was therefore inevitable, and it would have come sooner than it did but for the friction which arose over the relative values of the properties. The Union Pacific people combatted strongly Gould's opinion that the Kansas Pacific stock was

¹ *Pacific Railway Commission*, p. 451.

³ Page 51, above.

² Page 46, above.

⁴ *Pacific Railway Commission*, p. 178.

worth more per share than the stock of the Union Pacific.² Gould argued thus for his position: The Kansas Pacific is much less heavily capitalized than the Union Pacific, and so has lighter fixed charges; it runs fifty miles further east, and so has a longer stretch of agricultural country to draw from; it lies 2000 feet lower than the Union Pacific, and so is in less danger from snows; its land-grant is more valuable; its terminals at both Kansas City and Denver are very valuable.³

On the other hand, the Union Pacific people pointed out the much greater net earnings of their road and the large dividends which had been paid by it. Neither the Kansas Pacific nor the Denver Pacific had ever paid a dividend.³

The reply to this is found in the comparatively small capitalization of the southern roads and in the fact that under Gould's management they had been raised greatly in physical condition. The filling in of the Kansas Pacific territory led Gould to predict that that road would soon outstrip the Union Pacific in earning capacity.⁴ As an argument of another sort he showed how,

² *Pacific Railway Commission*, p. 660.

³ *Ibid.*, p. 897.

³ *Ibid.*, p. 888.

⁴ The merits of the case may be judged from the following figures :

	Mileage	Capital Stock	Funded Debt	Capitalization	Capitalization per Mile
Union Pacific.....	1039	\$36,762,300 ⁵	\$78,508,350.65	\$115,270,650.65	\$110,870
Kansas Pacific....	673	10,000,000	30,567,282.78	40,567,282.78	60,278
Denver Pacific....	106	4,000,000	581,000.00	4,581,000.00	43,216
	1823	\$50,762,300	\$109,656,633.43	\$160,418,933.43	

	Net Earnings	Net Earnings per Year	Net Earnings per Mile per Year ⁹
Union Pacific..	(1867-80) ⁶ \$64,020,833.56 ⁸	(10 years) \$5,835,713.37	\$5,616.66
Kansas Pacific..	(1867-80) ⁷ 8,220,217.60	(8 years) 1,077,988.45	1,601.77
Denver Pacific.	(1870-79) ⁷ 1,412,664.17	(10 years) 141,266.42	1,332.70

⁵ *Pacific Railway Commission*, pp. 4832-3.

⁶ *Ibid.*, p. 4802.

⁷ *Ibid.*, p. 4806.

⁸ From Boston books. Those at Omaha give slightly different results.

⁹ *Pacific Railway Commission*, p. 4988.

by an extension of its branches, the Kansas Pacific could seriously cut into the Union Pacific traffic.

Although all that Gould said was acknowledged to be reasonable enough, the Union Pacific party still held back, and this irritated Gould. Finally he began a series of maneuvers which quickly brought them to terms. How he bought the Central Branch has already been told.³ This road, lying between the Union Pacific and the Kansas Pacific, was bought for the joint protection of the two properties, with an understanding between Gould and the other directors that if consolidation was effected this should be taken in.⁴ Commodore Garrison was at that time extending the Missouri Pacific, which then consisted of a scant 300 miles of road,⁵ into Kansas Pacific territory. Gould threatened to build the Kansas Pacific as far east as Garrison built the Missouri Pacific west. Stormy interviews ensued, and finally Garrison suggested that the cheapest way to stop the fight was for Gould to buy the Missouri Pacific.⁶ This proposal met

	Interest per Mile per Year	Dividends 1869 (<i>i. e.</i> 1875) to 1880
Union Pacific.....	\$3,185.39	\$11,942,125 ¹
Kansas Pacific.....	2,294.71	
Denver Pacific.....	1,749.89	

COMPARISON OF ACCOUNTS FOR 1879.²

	INCOME.	Union Pacific	Kansas Pacific
Gross Earnings.....		\$12,983,155.74	\$4,839,188.42
Operating Expenses and Taxes.....		5,475,503.44	2,881,689.32
Surplus Earnings.....		\$ 7,507,652.30	\$1,957,499.10
Miscellaneous Income.....		436,889.84	
Total Income.....		\$ 7,944,542.14	\$1,957,499.10
	EXPENDITURES.		
Other than Dividends.....		\$5,386,891.81	\$1,654,464.69
Dividends.....		2,204,700.00	
Total.....		\$7,591,591.81	\$1,654,464.69

¹ *Pacific Railway Commission*, p. 888.

² *Ibid.*, p. 897.

³ Page 51, above.

⁴ *Pacific Railway Commission*, p. 661.

⁵ *Ibid.*, p. 506.

⁶ *Ibid.*, p. 509.

Gould's favor, and November 13, 1879,¹ the bargain was struck, \$3,000,000 being paid for 4000 shares of stock—\$750 per share.²

Having bought the Central Branch to protect both the Union Pacific and the Kansas Pacific, and the Missouri Pacific to protect the latter, Gould announced his next move. Since the Union Pacific lay north of the richest mineral belt and the Southern Pacific south of it, there was a place for a road between them. Gould proposed to furnish this road. The Missouri Pacific and the Kansas Pacific being operated harmoniously, it was only necessary to build westward from Denver through the Loveland Pass to Ogden, where the Central Pacific could be joined, in order both to tap the mineral belt and also to secure the shortest route across the continent.³ This would have ruined the Union Pacific,⁴ and the Union Pacific people knew it. There was panic in their camp. Frequent interviews with Gould were held, and it was urged upon him that he had already committed himself to the previously planned consolidation. Although Gould had the matter entirely in his own hands,⁵ he acknowledged the force of this statement, and at last consented to consolidation on the terms which he had originally offered. The first of the papers necessary to the carrying out of this bargain was drawn up January 14, 1880; the final articles of consolidation were signed January 24, 1880.⁶

This consolidation merged into one new company what had previously been three separate companies—the Union Pacific, the Kansas Pacific, and the Denver Pacific. The name adopted was the Union Pacific *Railway* Company, to distinguish it from the old Union Pacific *Railroad* Company. The amount of the capital stock was fixed at \$50,762,300,⁷ the sum of the capital stocks of the three constituent companies. This new stock was issued dollar for dollar of the old.

¹ *Pacific Railway Commission*, p. 506.

⁴ *Ibid.*, p. 509.

² *Ibid.*, p. 529.

⁵ *Ibid.*, p. 558.

³ *Ibid.*, p. 505.

⁶ For text see *Ibid.*, p. 668.

⁷ See note 4 on p. 57 above. In 1881 this was raised to \$60,868,500. *Pacific Railway Commission*, p. 885.

The new Union Pacific stock immediately became worth more than the old had been. As the Denver Pacific stock had been practically worthless except as controlling the Kansas Pacific traffic, and as the Kansas Pacific stock had stood considerably lower in the market than even the old Union Pacific stock, this move put money into the pockets of the holders of all three of these stocks. Among this number were several of the directors of the Union Pacific, but they all, except Gould, held much more of the stock of the Union Pacific—which rose least—than of the other kinds. It might be supposed that Gould was the one most anxious for consolidation. The contrary, however, is the truth. It was the Union Pacific people who did all the urging for consolidation, and Gould who simply acquiesced.¹

The reorganization of 1880 and the consequent economies were highly beneficial to all the properties concerned. The great genuine prosperity of the old Union Pacific Company was bequeathed to the new company in the shape of an apparent but not real continuing prosperity. During the years immediately following the consolidation, railway construction was active in the West. Gould foresaw the inevitable result of increased competition on the Union Pacific, and, while allowing a large floating debt to accumulate and while continuing the payment of dividends, he quietly unloaded his stock in small parcels all over the country. The effect of his dividend-paying policy was evident—he had succeeded in convincing the public that the Union Pacific had become an investment stock instead of a speculative one.²

¹ Union Pacific directors held stock as follows :

	Kansas Pacific	Union Pacific
Jay Gould.....	\$4,000,000	\$2,700,000
F. Gordon Dexter...	125,700	637,600
E. H. Baker.....	27,400	1,000,000
Russell Sage.....	443,000	1,470,000
Elisha Atkins.....	45,600	293,700
Frederick L. Ames...	179,600	3,861,200
Sidney Dillon.....	305,900	.....

Pacific Railway Commission, pp. 463, 700, 745, 393, 754, 687, 201, 702, 745, 393, 754, 687.

² In 1884 only one-fifth of the stock was held in Wall street.—*Report of Government Directors*.

About the year 1883 there came very serious changes in the railway situation in the trans-Missouri territory. The Atchison, Topeka and Santa Fé had the year before connected with the Southern Pacific, and its competition began to be felt.¹ The Northern Pacific was completed and claimed its share of the Montana and northern Coast trade. The Denver and Rio Grande reached Ogden, and divided the Salt Lake traffic. The Southern Pacific affected the business with San Francisco and the southern part of California. The Horn silver mines ceased to produce,² and their profitable freight was lost. Altogether, these things, within a year, made a difference to the Union Pacific Railway Company of several millions of dollars.³

When Gould succeeded in stepping from under his load of Union Pacific securities and the ownership of the road changed hands, there came a change in the management of the road. In 1884 Charles Francis Adams became president. He found himself in command of a road whose builders had over-capitalized it and whose subsequent owners had trickishly weighted it down with further debts while its earning capacities were being impaired. Adams stopped the payment of dividends and set to work on the hopeless task of staying the road on its descent toward bankruptcy.⁴

¹ *Pacific Railway Commission*, p. 3346.

² *Ibid.*, p. 68.

³ *Ibid.*, p. 85.

In 1886 the transcontinental traffic was divided with six competitors, and constituted but $7\frac{1}{2}$ per cent. of the whole traffic of the Union Pacific.—*Report of Government Directors*.

⁴ Connected with this taking of the presidency of the Union Pacific by Adams is a letter of his, the equal of which could not be found if all the annals of the railway industry were searched. It was called out by a letter signed "Investigator" in the *Boston Advertiser* of December 18, 1882, in which the question was raised what it is that determines the market value of railway stocks. Adams's letter is given in full below:

To the Editors of the *Boston Advertiser*:—I notice what Investigator says in his communication of yesterday in your financial columns on the matter of the present price of Union Pacific stock. He speaks of "Wall Street values," and the "intrinsic worth" of the stock as "an investment." I should like to say something on this point, as it seems to me of more importance just now than at first appears.

On one important feature of railway policy Gould and Adams were entirely agreed. Both recognized the absolute necessity of building up a system of branch roads which should feed the main trunk with traffic. The roads which compete with the Union Pacific are of course under the same necessities, and whenever one of these roads has to build a branch, either to secure valuable traffic or to keep a competitor from intruding into territory naturally its own, the branch is built and the capitalization of the parent road is increased to pay for it. This mode of procedure is impossible with the Union Pacific. Its charter is a particularly narrow one, and provides for the consolidation of only those roads which were mentioned in the charter. The Union Pacific must therefore adopt a more roundabout method of procedure. The branches of that road are controlled by the possession of a majority of the stock, which allows the Union Pacific people to vote a lease of the branch to the parent road, the terms usually being a guarantee of the interest on the bonded indebtedness.

Some years ago, in 1878, I think, I was a government director of the Union Pacific. As such I had to make a thorough investigation of the property and report upon it. I was then so much impressed with the value of the road as an investment, that when I shortly after resigned, as agent of certain persons and adviser of others, I was instrumental in some heavy purchases of the stock. They were made at figures not materially different from those now ruling, and as an investment have resulted well. Some months ago when the present depression began to affect the price of the stock, I thought it would be well to again look pretty carefully into its value. Accordingly I did so, passing two whole weeks in October, going carefully over the whole line in company with its officers, studying its system of feeders, informing myself as to its policy, and generally having every source of information freely opened to me. There could be no question as to the greatly improved condition of the property between my examination in 1878 and my present examination. There could be equally little question as to the development of the country or of the business of the road.

Returning East thoroughly satisfied on these points, I went to New York. I found a veritable panic prevailing in respect to the stock. It had fallen fifteen points and was still going down. Everyone I saw was a "bear" upon it, and I was assured it was going to 75. So full was the air of all sorts of "bear" stories of enormous floating debts, falsified earnings and over-issues of stock, that when I came to Boston I went at once to the office of the Company, there to complete my inquiries. I did not go to the treasurer, but as Mr. F. L. Ames is a friend of mine of long and intimate standing, I went to him and told him what I wanted to find out. He at once laid before me the private reports for the Committee of Directors bearing on these points,

This spending of money on branches has given rise to one of the commonest accusations against the Union Pacific; namely, that it diverts its funds from the treasury of the main line, where the United States could claim a share of them as payments on the debt of the road to the government, to the treasuries of the branches, where the government has no rights. If it is wise for the Union Pacific to build branches, this is unjust, and it would seem that no student of the railway situation in the West, where every road is forced by the fierce competition for traffic to extend its lines, could doubt the wisdom of this course. It would seem that the United States as a large creditor would gladly see the Union Pacific Company spend its earnings in the betterment of the property, rather than that there should be paid on the debt of the government 5, or 25, or even 50 per cent. of

and told me to satisfy myself. I had before me all that he had to show. If I wanted anything more the original books were at my service.

The result of my inquiries has been a curious insight, not into the weak spots of the Union Pacific road — these I will say at once have escaped me — the insight has been in the ways and operations of Wall street. I have studied the several steps in one grand organized raid of a successful "bear" campaign. Had I time to follow it out I could make it an account of no little interest. I could show the thorough knowledge the Wall Street operators had of the way the stock was held, and how they based their plans upon this knowledge, so as "to shake the weak stock out." Unlike many other companies, the Union Pacific, with its 600,000 shares, was in no one's keeping. A great deal of the stock was floating about or carried on margin. There was a grand chance for a "bear" campaign and the bears knew it. The stock list shows how skillfully, how persistently, and how boldly they availed themselves of it. A list of the charges set afloat and of the reports successively day by day telegraphed over the country, especially to New England, during the last ten weeks, would be a curiosity.

Meanwhile, the point I wish to make is this: The whole result of my investigations, which have been as thorough as I knew how to make them, has satisfied me of the investment value of this property. Believing in it, and having led others to invest in it, I want to see the control of it in New England. The Chicago, Burlington and Quincy and the Union Pacific constitute together the Broadway or Washington street of this continent. They will always be the chief commercial thoroughfare between Chicago and San Francisco. Other lines will be built through to the north and to the south of them; but these will be to the Union Pacific only what Third or Sixth avenues are to Broadway. At least that is the way it strikes me. Seeing it in this light, the Union Pacific seems to me a very valuable property, with a very great future. So far as occupying the country is concerned, the policy the Company is pursuing is a thoroughly sound one. Its surplus earnings have for years been invested and are

those net earnings; for the ultimate payment of the debt depends on the earning capacity of the system, *and on nothing else.*

Fortunately, there is no uncertainty as to whether the branch lines are, or are not, valuable to the Union Pacific system. Charles Francis Adams, who came to the problem of managing the property rather with the training of the student than with that of the practical railway manager, caused the accounts for the year 1886 to be so kept that the income due to the branch lines could be separated from the rest. He found that on an investment in branch lines of \$45,000,000, the actual profit to the main line on business which they gave it was \$4,952,000, or 10.95 per cent.¹ The question surely needs no further discussion.

A minor feature of the question of branch roads has given rise to another accusation against the Union Pacific—that it has diverted funds from its own treasury to the treasuries of its branches, to avoid the payment of the proper percentage to the government, by means of the “constructive mileage” device.²

now being invested in feeders. Under these circumstances an opportunity of securing the control of the property in New England is now offered. It is but necessary to quietly take the stock at the price at which the Wall Street bears offer it. It has already been drifting to Boston in considerable quantities. The object of my present writing is, in so far as I can, to cause it to drift here faster. I am, etc.,

Boston, December 18, 1882.

C. F. Adams, Jr.

(*Boston Advertiser* of December 19, 1882.)

A few days after this remarkable exhibition of *naïveté*, the *New York Indicator* commented as follows:

“The discoveries made by Mr. Adams in the methods of Wall Street for making and unmaking stock values may be new to him, but they are very old to those who have been diligent students within its classic shades—and paid dearly for their tuition. If he has been a close student he has learned that large earnings, valuable property, judicious management, a general state of prosperity, with superior future prospects, go no further in making up stock values than the machinations of a ring of Wall-street operators who have the money at their command to sustain a scheme for making a fictitious market, and that intrinsic worth is not always the base of stock values.”

But the New England public, unlike the *Indicator*, put faith in Adams's discoveries, and many investments were made on the strength of his letter. The result was of course disastrous. Adams then felt called upon to take hold of the property and make good the things he had said of it. Hence his election in 1884.

¹ *Pacific Railway Commission*, pp. 616-17.

² When two roads co-operate in hauling freight, the sum received for the service may be divided in proportion to the distance hauled by each—“prorated”; or the

Any difference in the compensation for services where two roads co-operate in hauling the freight must be justified by showing either that the road receiving the advantage renders a more valuable service than the other, or that it renders the same service at a greater cost to itself. When one of these things has been shown, it is simply a question of expediency whether the division be on the basis of the "rate prorate," the "arbitrary," or "constructive mileage."

Let us look at the matter as it pertains to the Union Pacific in a concrete case. Suppose a spur 100 miles in length to leave the Union Pacific 500 miles west of Omaha. Its traffic will be gathered up at the way stations and turned over to the main line largely in car-load lots, which will be hauled continuously 500 miles. This sort of traffic is the most profitable which comes to a railway, and if it could not be obtained otherwise it would be a good investment for the Union Pacific to prorate it and pay the deficits on the branch road's interest accounts. But there is a better way of dealing with the problem. It is evident that some advantage in the division of the money is due to the branch for these reasons: The terminal charges are as heavy on the spur as on the main line, and therefore, because of the difference in the lengths of the hauls, they constitute a much larger percentage of the whole cost of the service. Since the hauling capacity of a spur is always much less fully utilized than that of the main line, the actual cost of the hauling part of the service would be more per mile on the spur than on the main trunk, for as the traffic increases the cost per ton-mile decreases. If, then, one-sixth of the freight charges is given to the spur, it is evident that it is not getting its deserts, for it has been shown that the spur renders the costlier service. The Union Pacific management recognizes this fact, and makes constructive-mileage arrangements with the branch roads. This is a practice total charge may be divided in proportion to the local charges on the two roads—the "rate prorate;" or, however large or small the total charge may be, one road may get a certain fixed sum—the "arbitrary;" or one road may be given an advantage by having each mile of its haul counted as more than a mile,—one and one-half, two, or three miles,—after which the division is prorata. This last is "constructive mileage."

which has long been used in all parts of the country, and approved by all students of railway practice.

The policy of building feeders was adopted as early as 1877, but the great expenditures did not come until after 1880. During the prosperous years when 12 or 14 per cent. was being earned, half of it, or several millions of dollars each year, was put into the property.

The most important of the branch lines built in this way is the Oregon Short Line. This company was incorporated in 1881, and has a line running from Moxa, Wyoming, a station 180 miles east of Ogden, northwest to Huntington, Oregon, where it connects with the line of the Oregon Railway and Navigation Company. This extends from Huntington to Portland, whence steamers run north to the cities of Puget Sound and south to San Francisco. The Union Pacific owns about five-ninths of the stock of the Oregon Short Line, and the Oregon Short Line owns a controlling interest in the stock of the Oregon Railway and Navigation Company.

This line was projected because the Central Pacific had begun to divert its traffic from the Union Pacific and send it over the Southern Pacific route, which made an independent connection with the coast seem desirable. The Northern Pacific Company had been provided for by an Act of Congress of July 2, 1864,¹³—the same day as the passage of the act which made possible the building of the more southern group of the Pacific railways,—but after seventeen years its line was still incomplete and seemed likely to remain so. Therefore, in 1881, this Oregon Short Line enterprise was started. But Henry Villard suddenly appeared in the field, and the Northern Pacific had completed its line even before the Oregon Short Line was built. Thus the traffic which it was expected would follow one route had to be divided between two. This system, although it is an annual charge upon the Union Pacific treasury for guaranteed interest, is very valuable because of the business which it brings to the parent road.

¹³ *Statutes at Large*, 365.

During the first three years of his administration, Adams put \$16,000,000 into the Union Pacific property, half of it coming from net earnings and half from the sale of securities.¹ But he was in a losing fight, and later the debt piled up in spite of him. In 1890 money had to be had, and no one but Gould would furnish it. Adams therefore stepped out, and the second Gould régime began.

A change in management, however, could not save the road. Competition has been carried so far in the railway world that the rates now in effect do not afford a fund for insurance against unexpected misfortunes, and the bad season of 1893 brought to the Union Pacific its legitimate effect and threw it into the hands of receivers. Some roads, not so heavily handicapped as to interest charges, escaped with the cutting down or the annihilation of dividends. For the Union Pacific there was no hope, and now, instead of being a strong moving factor in the industrial world, it is an inert mass of assets, held together to protect the creditor until a reorganization can be effected.

¹ *Pacific Railway Commission*, p. 85.

CHAPTER VI.

PUBLIC OPINION, LEGISLATION, LITIGATION.

A brief outline of the history of the Pacific railway project has now been given. It remains to fill in that outline with several sets of facts which have purposely been kept in the background heretofore in order that each of the topics to which they relate might be treated as a complete whole and in its proper relations. This chapter is to be devoted to three such sets of facts which are so intertwined that it seems inadvisable to separate them,—the changes in public opinion, legislation, and litigation.

The Pacific railways, being from their origin and from the nature of their charters much more nearly public institutions than other American railways, have been particularly sensitive to the fluctuations of public opinion. Concerning this group, therefore, much more than concerning any other of our railways, public opinion has crystallized into legislation. From this fact, in turn, springs one of the most unfortunate features of the Pacific railway problem,—the constant necessity of taking these laws which govern the relations between the creditor-government, and its creature, the road, into court for interpretation. These suits, even when brought in the most friendly spirit,—the courts being the only places where these differences of opinion as to interpretation can be settled,—give an air of antagonism between the roads and the government.

How the desire for a Pacific railway spread from individuals to communities, from communities to whole states, and how the states, speaking through their legislatures, forced the consideration of the project upon Congress, has been briefly noted.⁵ In

⁵ Chapter i.

order to a full understanding of the problem of the Pacific, railways it is necessary also to note the trend of public opinion at various later times, those at which important legislation was had. This is not for the sake of interpreting those laws, for the courts properly look only to the contents of the laws themselves for that. It is for the sake of getting a proper point of view for the determination of what shall be the course of future legislation. Passing over, then, the early agitation,¹ it is necessary to know what men thought of the Pacific railway when the Act of 1862 was under discussion.

The terms of the Act of 1862 show that a majority of the members of the Thirty-seventh Congress thought that the Pacific railway would be a financial success. There was, however, a number by no means small who thought just the opposite.²

¹In the discussions which were had over the rather crude propositions of the period before the war, there appear all sorts of reasons for and against the project, every variety of opinion as to the powers and duties of the government, all grades of knowledge and of ignorance of the matter in hand, much of far-sighted patriotism, and unfortunately much of its lack. The first arguments for a road were, as has been said, commercial, and only secondarily political. These were strong enough to induce a vigorous agitation very early—long before the Oregon question had been settled. At the close of the Mexican War, when our Pacific coast line was more than doubled, these commercial arguments got added strength. With the discovery of gold in California and the consequent great immigration from the eastern states to the coast, the demands for a road grew still stronger.

²Mr. Lane of Kansas: "I am one of the senators who believe that this road, when completed, will be one of the great paying thoroughfares of the world . . ."

Mr. Clark of New Hampshire: "That only shows how we differ. The senator from Kansas thinks it will be a good paying road. I believe that if the good God were to make that road for you, right through, you could not form a company in the country today that would run it without failure. . . . Whether I am right or not, I do not build the road because I think it is to be a paying road; I build it as a political necessity, to bind the country together and to hold it together, and I do not care whether it is to pay or not; here is the money of the government to build it."—Thirty-seventh Congress, second session, p. 2788.

Mr. Morrill of Vermont: "I am not to be deceived by any promises that this road is to be built and run by any party but the United States. Every dollar that it takes to construct the road is to be contributed by the United States. There is not a capitalist who will invest a dollar in it if he is to be responsible for its construction for any considerable distance. . . . As a commercial or economical question, such a road is utterly defenseless; but as a national question, it has great merits, which in due time will be recognized."—Thirty-seventh Congress, second session, p. 1708.

Others, while acknowledging that the road was unlikely to pay for itself directly,—*i. e.*, to repay the debt,—thought that it would indirectly prove a good investment by the saving which it would effect on the expenses of carrying the mails, on the bills of the army, and in other ways.¹ In support of this position they pointed to the excessive charges for carrying the mails by stage and pony express, the methods then in use, upon which a large saving could surely be made as soon as a road was built.² But

Mr. Wilson of Massachusetts: "I have studied the railroad system of this country, and its conditions, and I make the prediction here today, and let it go upon the record, that the man is not born in this country who will ever see this nation get back this money. It is an impossibility. The road will never be worth it."—Thirty-seventh Congress, second session, p. 2757.

Mr. White of Indiana: "Now, sir, I contend that, although this bill provides for the repayment of the money advanced by the government, it is not expected that a cent of the money will ever be repaid. . . . I undertake to say that not a cent of these advances will ever be repaid, nor do I think it desirable that they should be repaid. This road is to be the highway of the nation. . . . I think, therefore, that this will turn out a mere bonus to the Pacific railroad, as it ought to be."—Thirty-seventh Congress, second session, p. 1891.

Mr. Wilson of Massachusetts: "I have little confidence in the estimates made by Senators or Members of the House of Representatives as to the great profits that are to be made, and the immense business that is to be done by the road. I give no grudging vote in giving away either money or land. I would sink \$100,000,000 to build the road, and do it most cheerfully, and think I had done a great thing for my country if I could bring it about. What are seventy-five or one hundred millions in opening a railroad across the central regions of this country that shall connect the people of the Pacific and Atlantic, and bind us together? Nothing."—Thirty-seventh Congress second session, p. 2754.

¹ Mr. Wilson of Massachusetts: "Sir, I repeat what I have before said, that in voting for this bill and this appropriation of \$116,000,000, I vote with the conviction that this sum of money is to go for the general interests of the country, and that we never can expect it back in the treasury. If the interest on these bonds, from the time the road commences, forever, can be paid by the services the road renders the country, it is as much certainly as I can expect. I vote for the road with that expectation and that understanding."—Thirty-sixth Congress, second session, p. 615.

Mr. Wilson of Massachusetts: "I vote for the bill with the expectation that all we get out of the road—and I think that it is a great deal—will be the mail carrying and the carrying of munitions of war, and such things as the government may need, and I vote for it most cheerfully with that view."—Thirty-seventh Congress, second session, p. 2757.

² *Question.* Have you any recollection, Mr. Dey, by which you can state what the prevailing rate of wagon transportation was from the Missouri River to the west?

this item was insignificant when compared with the expense for Indian fighting armies. The great plains were the breeding grounds of almost interminable Indian wars, and it was argued that the railway furnished the only possible solution of the vexing Indian problem. When troops could be rapidly and surely transported from one post to another, a much smaller force would be adequate for policing the Indian country, and it was argued that the saving on army bills would equal the interest on the debt which the government would have to assume to secure a road.¹

Answer. Yes, sir. *Q.* If you can, please state it. *A.* To supply my parties I paid from 16 to 20 cents a pound for freight from the Missouri River to points on the Black Hills, north of Denver. I paid 25 cents a pound for the rations to support my men out to Fort Saunders, and I paid 30 cents for freight that I sent to Salt Lake to supply my men. I might have paid a little more than the average price, but I think not. I loaded my teams with all the supplies that they could manage to carry, and then I left supplies at various points that were accessible to them when they were making their surveys. About 30 cents a pound to Salt Lake was as low as I have heard of its being done. *Q.* That was in what year? *A.* 1863 and 1864. *Q.* How was transportation conducted? *A.* By teams—cattle, mules, and horses.—Testimony of Peter A. Dey before the Pacific Railway Commission of 1887.—*Pacific Railway Commission*, p. 1430.

¹ In response to a resolution of the House, Secretary of War Stanton presented a table showing the amounts paid by the Quartermaster General during the fiscal years 1857-1861 for the transportation, between the Mississippi River and the Pacific Ocean, of troops and supplies. The sums were:

1857.....	\$2,101,367.31	1860.....	\$2,160,588.27
1858.....	3,961,848.40	1861.....	1,503,799.09
1859.....	4,319,550.95		
			\$14,047,154.02

The Secretary stated that these figures did not cover all the freightage paid, and, by reference to other sources of information, the additional sums were found to be, in 1858, \$4,000,000; in 1859, \$3,000,000; in 1860, \$1,500,000; in 1861, not ascertained; for 1862, estimated, at least \$6,000,000. Thus it was estimated that the annual bill for army transportation would be nearly \$6,000,000, and that the postal service would cost \$1,500,000 more. Adding the sums paid out for transportation of naval supplies, the sum would be over \$7,000,000 per annum.

These facts were presented in a speech by Mr. Campbell of Pennsylvania.—Thirty-seventh Congress, second session, pp. 1578-9.

Mr. Latham of California: "Official reports and other authoritative data show that the average annual cost, even in times of peace, in transportation of troops, with munitions of war, subsistence and quartermaster's supplies, may be set down in round numbers at \$7,300,000. The interest upon the credit loan of \$65,000,000 of bonds will be annually \$3,900,000, leaving a net excess of \$3,400,000 over the present cost."—Thirty-seventh Congress, second session, pp. 2676-7.

Although these arguments touching the purse were potent enough to make it certain that a road would eventually be built, reasons of quite another sort induced the taking up of the task at the particular time when it was taken up—a time than which none more unfavorable could have been chosen. The decisive arguments were political. The struggle of 1850 to determine whether California should be slave or free territory was not forgotten, and with the outbreak of the war there arose the danger that the large southern element would again come to the surface and succeed in throwing the influence of the state on the side of the South. This could be prevented by railway connection with the free states.

Still more important than this menace from within was one from without. There was good evidence that if the Trent affair had ended in open rupture between the United States and England, the British fleet on the Pacific would immediately have struck at San Francisco, and, in the then isolated position of the coast, nothing could have prevented the success of such an assault.¹

These, then, were the reasons for the enactment of the Act of 1862. It was a war measure, put through when the nation was in imminent danger of disruption, and as such it should be judged. This is a fact which is too often lost sight of.

During the next two years there came no changes in the state of affairs to lessen the demand for a road. It was still considered a national necessity. The costliness of railway building and the high prices consequent on the war kept capitalists from taking hold of the enterprise.* On the other hand, the lavish expenditures of the government made necessary by the war produced in the minds of many congressmen a feeling that immense expenditures were the natural and legitimate thing, and the gen-

¹ Mr. Sargent, of California: "I know the fact to be that during the pendency of the Trent difficulty warning was sent by an eminent Californian, then in England, that orders had gone out to the British Pacific fleet to strike at San Francisco as soon as news arrived of the commencement of hostilities."—Thirty-seventh Congress, second session, p. 1595. Although it has since proved that this was a false alarm, it was temporarily a potent factor in the case.

* See page 17, above.

erosity to the Pacific railways is but one evidence among many of this feeling.

The call for a railway to the Pacific continuing strong and unmistakable, the Act of 1864 was passed. This move was approved by the country at large, and the men who undertook the building of the road were almost universally applauded. The rising tide of approval seems to have left its high-water mark in a resolution passed by the House of Representatives December 13, 1865, directing the Committee on the Pacific railroad to inquire what further legislation was necessary to expedite the building of the road.¹

When the war came to an end, the expenditures of the government settled back somewhat from their abnormal level. By the end of 1868 there began to be a closer inspection of all kinds of appropriations, and April 5, 1869,—five weeks before the Union Pacific and the Central Pacific met at Promontory Point,—there was raised in Congress the first warning voice against the Credit Mobilier as a corrupt concern.² Although from this time on frequent accusations along the same line were made in the legislative halls, the country at large did not take up the cry until considerably later.

Four days after this first arraignment of the Credit Mobilier, on the 9th of April, 1869, congressional distrust of the management of the Pacific railways was still further evinced by the passage of a joint resolution calling for the appointment of a commission "of eminent citizens" to examine the roads of the Union Pacific and the Central Pacific companies for the sake of ascertaining whether they fulfilled the requirements of law, and also to learn what further expenditures were needed to make them first-class roads.³ In August the President appointed five men to constitute this commission, and its report was given October 30, 1869. This specified the improvements which were needed,

¹ Thirty-ninth Congress, first session, p. 49.

² Forty-first Congress, first session, pp. 503-4.

³ Forty-first Congress, first session, pp. 677, 703-4. Resolution approved April 10, 1869.—16 *Statutes at Large*, 56.

and estimated the necessary expense at \$1,586,100 for the Union Pacific, and \$4,493,380¹ for the Central Pacific. Subsequently another commission was appointed to see if the requisite improvements had been made. This reported, October, 1874, that the Union Pacific had spent \$3,596,075.79, and the Central Pacific \$5,121,037.23, instead of the sums required.²

The proper representatives of the government, commissioners appointed for that purpose, had from time to time examined the completed sections of the Pacific railways, and sworn that they fulfilled the requirements of the charter acts. The last sections were accepted thus, July 15, 1869.³ The action of April 9 and 10, however, expressed the doubt of the government as to the reliability of the reports received up to that time and called for a re-examination of the whole road.⁴ Consistent with this later action, the Secretary of the Interior gave an order November 3, 1869, to the Commissioner of the General Land Office to withhold the patents for one-half of the lands then ready to be given to the Union Pacific, on the ground that the road was not yet completed.⁵ This order was continued in force five years, its withdrawal being consequent on the report of a commission appointed May 1874, reporting during the following November, that the road had been completed according to law, October 1, 1874.⁶ According to the official utterances of the government this was the last time that the road was completed!

As the subsidy of the Pacific railways consisted of United States bonds, the interest thereon was, of course, demandable of the United States treasury. The question whether the government could demand from the companies the current repayment of this interest was raised by a requisition for such interest made

¹ *Report on the Pacific Railroad*, May 14, 1869, p. 25.

² *Ibid.*, p. 11.

⁴ See page 73 above.

³ *Pacific Railway Commission*, pp. 4255-6.

⁵ 99 U. S. 416.

⁶ A further evidence of the distrust of the government is found in 19 *Statutes at Large*, 169. The sum of \$10,000 was appropriated to re-survey the roads, on the supposition that the subsidy had been paid for more road than existed. By this re-survey the Union Pacific was shown to be 1,247 miles, and the Central Pacific, 951 miles longer than reported.—*Ex. Docs.*, Forty-fourth Congress, second session, No. 38, p. 9.

September 3, 1870. The Act of 1862 said that the principal of the bonds and the interest thereon should be a debt of the companies, for securing the payment of which the government should have a mortgage on the bond-aided portions of the roads, not specifying different dates for the maturity of the two parts of the debt. While the Act of 1862 was being framed, attention was called to the fact that the payment of interest was postponed until the maturity of the principal, and an insertion was proposed to change this. But Congress consciously, intentionally, and definitely refused to require the companies to pay the interest as it fell due.¹ The companies therefore refused to comply with the demand. The Attorney General upheld the position of the Treasury Department and asserted the further right to withhold payment for all services rendered by the roads to the government. This was done. The matter then came up in Congress, and an act was passed approving the action of the companies and directing the Secretary of the Treasury to pay in cash the one-half compensation due according to the provisions of the law.² Two years later, however, Congress directed the withholding of this compensation for services, at the same time providing that the companies might sue for the amounts involved in the Court of Claims.³ Advantage of this privilege was taken, and the court decreed that the government must pay the sums which it was holding back. Not a great while after this decision had been affirmed by the supreme court of the United States,⁴ a new law was framed which altered materially the status of the roads. Consideration of that, however, must be postponed for the present.

While the whole country was clamoring for the completion of the Pacific railway, there seemed to be no thought that the Credit Mobilier, which was supposed to be playing a large part in pushing forward the Union Pacific enterprise, was anything

¹ Thirty-seventh Congress, second session, p. 1911.

² 16 *Statutes at Large*, 525, sec. 9. 99 U. S. 72 also decided that the interest was due from the companies at the maturity of the principal, not as it accrued.

³ 17 *Statutes at Large*, 508, sec. 2.

⁴ 99 U. S. 72.

but a highly commendable concern. But when success was assured and profits were in sight, there began to arise murmurs of disapproval. The American company with the foreign name borrowed bad repute from the Credit Mobilier of France.

The unfavorable allusions in Congress, which began in April 1869, were made chiefly by men who but poorly understood the connection between the Union Pacific and the Credit Mobilier. Their condemnatory opinions, however, gradually permeated the public mind. Then came the presidential campaign of 1872, when everything which could be made to furnish political capital was eagerly seized upon, and naturally the Credit Mobilier did not escape notice. Charges of corruption connected therewith were made against prominent politicians so late that lack of time rendered adequate explanations impossible. If explanations could not be given, the only alternative, politically speaking, was denial of all connection with the concern. Such denials were made, and they carried with them necessarily an arraignment of the Credit Mobilier as corrupt. The reactionary feeling against the prodigal expenditures and loose methods of the war period, when constitutional provisions were construed in the broadest manner possible and the ordinary rules of business morality gave way before the startlingly new conditions, was widespread. Add to this the extravagant statements of the campaign, and an investigation of the Credit Mobilier was inevitable. Individual congressmen whose names had been connected with it demanded vindication; others thought they saw a chance to blacken their opponents; none dared to vote against the proposed movement lest they thereby compromise themselves.

The House of Representatives, therefore, passed a resolution December 2, 1872, providing for a committee of five "to investigate whether any member of this House was bribed by Oakes Ames, or any other person or corporation, in any matter touching his legislative duty."¹ This committee, the Poland Committee, began its work December 12, 1872, and took its last testimony February 19, 1873.² Under a resolution of January 6,

¹ Forty-second Congress, third session, p. 11.

² See p. 19 above.

1873, a second committee of the House, the Wilson Committee, was given the task of investigating the connection between the Credit Mobilier and the Union Pacific. Its first sitting was held January 10, 1873, and it likewise heard its last testimony February 19, 1873.¹

The testimony elicited by the Poland Committee showed that Oakes Ames was an extremely unsystematic business man, careless as to details. The discrepancies between his scanty records and those of the men with whom he dealt were easily made to appear to hide dishonesty. He was also shown to be a man who was very unlikely to hide his meaning in phrases intentionally ambiguous. But his careless expressions were of just the sort which could most easily be made to appear full of evil meaning. He gave the committee in their attempt to get to the bottom of the matter every possible assistance, except when by holding back it seemed to him possible to shield another. As to his own asserted guilt he was perfectly open. Other congressmen who were implicated testified with equal candor, and those who made any attempts at concealment only hurt themselves thereby.

It appears from the Poland Committee investigations that Oakes Ames, after he began to take an interest in the Union Pacific enterprise, tried to connect influential men with it. To that end he tried to get men of means both in and out of Congress to take shares in the Credit Mobilier. In order that a lack of ready money might not deter them from investing, he agreed with some of his friends to hold stock for them without any payment in hand. Others he guaranteed against loss, as Durant had done when securing Union Pacific stock subscriptions. The record of these transactions Ames kept in a small memorandum book which he carried in his pocket. It is not strange that disagreements should arise over the terms of contracts thus recorded. Before the letting of the Ames contract numerous promises of Credit Mobilier stock at par had been made. Later, when success seemed in sight, many came to Ames for stock which they said had been promised them, for now it had suddenly acquired a

¹ See p. 17 above.

high value. It was selling this stock previously promised, at the rate agreed upon—par,—which constituted Ames's offense. Doubtless he found it advisable to sell, and did sell, Credit Mobilier stock where definite bargains had not been made. He certainly wanted the Union Pacific to have friends in Congress. But there was no legislation then pending, there was none proposed, there was none wanted.

The Poland Committee said in its report: "In his negotiations with these members of Congress Mr. Ames made no suggestion that he desired to secure their favorable influence in Congress in favor of the railroad company."¹ "The committee have not been able to find that any of these members of Congress have been affected in their official action in consequence of their interest in Credit Mobilier stock."² "The committee do not find that either of the above-named gentlemen, in contracting with Mr. Ames, had any corrupt motive or purpose himself, or was aware that Mr. Ames had any."³ "The committee find nothing in the conduct or motives of either of these members, in taking this stock, that calls for any recommendation by the committee of the house."⁴

The report of the committee then proceeded to quote the statute against bribery, and asserted that Oakes Ames had laid himself liable to its penalties. It therefore recommended his expulsion from Congress—for a transaction which constituted bribery, but in which only one party was in any way guilty.

Mr. James Brooks, a member from New York, was asserted by the committee to have procured certain shares of Credit Mobilier stock which were meant to influence his action as a member of Congress and as a government director of the Union Pacific, he knowing that they were meant thus to influence his action. The recommendation was for his expulsion likewise. The testimony does not seem fully to establish the charge against Brooks.

Anticipating the attack which would be made on these

¹ P. viii.

³ P. ix.

² P. viii.

⁴ P. x.

recommendations, the committee gave up a considerable section of their report to a defense of their right to deal thus with Ames and Brooks. The Judiciary Committee of the House, to which the testimony taken by the Poland Committee was referred "with instructions to inquire whether anything in such testimony warrants articles of impeachment of any officer of the United States not a member of this House," gave a report in which it was made very evident that the House had no jurisdiction in the case at all, the alleged offenses having been committed before the existence of the then House.¹ This may in part account for the fact that the House, instead of expelling Ames and Brooks, censured them. But if it had a right to censure, it had an equally good one to expel. Be that as it may, within a few months both Ames and Brooks had carried their loads of disgrace into the grave—a fact of no importance in the case, but one which accentuates the poetic injustice of the whole proceeding.

The Wilson Committee was appointed because the public believed that immense profits had been made by the builders of the Union Pacific and disposed of improperly through the Credit Mobilier. It investigated thoroughly, but, like the Poland Committee, with preconceived notions always in mind. Both committees took testimony so voluminous that neither the members of Congress nor the newspaper men nor the ordinary student of current affairs could hope to digest it. That the committees themselves did not digest it is shown by various statements incorporated into their reports which the testimony does not bear out at all. The country demanded condemnatory reports from the committees, and it got them. The widespread jobbery of the war period had to be denounced, and the Credit Mobilier case presented the occasion for such a denunciation. It was an evidence of a change of attitude by the public, of an aroused public conscience. If the spirit of reform had not taken this mode of expression it would have found some other.

The work of the Credit Mobilier was complete when it had carried out its first and last contract for building the Union

¹ Forty-second Congress, third session, p. 1651.

Pacific road from Omaha to the one-hundredth meridian. But its capacity for causing trouble was far from being filled at that juncture. Careful business methods were not a part of the equipment of the projectors of the Union Pacific, and when the great work was done there was no settling up of accounts. A claim was therefore made by the Credit Mobilier that certain large sums of money were still due to it from the Union Pacific, and this claim was not settled until Jay Gould came into control of the road. He thought that the holders of the Credit Mobilier stock ought to turn their shares into the hands of the Union Pacific, thus carrying the claim back into the Union Pacific treasury. Some agreed to do this if the rest would follow their example, but the solution could not be effected thus. A committee was finally appointed to adjust a settlement between the two organizations. The Union Pacific contention was that the contract with the Credit Mobilier had been an illegal one, and that therefore a refunding of the profits thereon could be called for. By balancing these claims against one another, an agreement was come to whereby mutual releases were given, and the Credit Mobilier at last ceased to be a disturbing element.

After the Credit Mobilier investigations, the next important evidence of popular distrust of the Pacific railways and animosity toward them was the Thurman Act, which became a law May 7, 1878.¹

The Act of 1862 had provided that 5 per cent. of the net earnings of the roads should be applied toward liquidating the debts to the government. It had also provided that the whole sum earned by the roads for transporting government supplies, mails, etc., should be applied to the same use. Among the various changes made by the Act of 1864 for the sake of making easier the requirements laid on the roads was one that provided for the application of only one-half the sums earned for government transportation to the debt and the payment by the government to the roads of the other half in cash.

¹ *Statutes at Large*, 56.

The Thurman Act dealt with both these provisions. As there had arisen disputes over what constituted net earnings,—which suits had been decided by the courts against the contention of the government,—net earnings were defined to be the sum which was left after subtracting from the gross earnings the sums necessary for operating the road and keeping it in repair, and the sum paid for interest on the first-mortgage bonds.

Next it was provided that the whole of the compensation due for government services should be withheld from the roads, half of it being applied on the debt to the government and half being paid into a sinking-fund. The sums paid into this sinking-fund were to be invested by the Secretary of the Treasury in United States bonds, preferably those bearing 5 per cent. interest, and the interest was to be reinvested in like manner. Thus the sinking-fund was to earn compound interest.¹

It was provided that other sums should be paid into the sinking-fund beside those for services. The Union Pacific was required to pay annually \$850,000, or so much thereof as, when added to the half-sum due for government transportation and the 5 per cent. of net earnings required by the Act of 1862, should

¹ Why this fund should be invested in United States bonds, instead of in Union Pacific first-mortgage bonds — a lien prior to that of the government,—it is hard to say. Such investment was finally permitted by an Act of March 3, 1887 (*24 Statutes at Large*, 488). That this was not meant for a concession to the roads is very evident from the tone of the whole law, which is one more evidence, among many, of the continued distrust which Congress felt toward the Pacific railways.

Section 5 of this law said: "That whenever it shall be made satisfactorily to appear to the Secretary of the Treasury, by either of said companies, that seventy five per centum of its net earnings as hereinbefore defined, for any current year, are or were insufficient to pay the interest for such year upon the obligations of such company, in respect of which obligations there may exist a lien paramount to that of the United States, and that such interest has been paid out of such net earnings, said Secretary is hereby authorized, and it is made his duty, to remit for such current year so much of the 25 per centum of net earnings required to be paid into the sinking-fund, as aforesaid, as may have been thus applied and used in the payment of interest aforesaid."

It is not quite clear what Congress meant by enacting this clause. Earlier in the statute it was provided that the interest on the first-mortgage bonds should be one of the deductions from gross earnings before it was determined what were the net earnings. Thus there could never be any call to pay this interest out of net earnings.

equal 25 per cent. of the whole net earnings. That is to say, the Union Pacific would pay into the sinking-fund in a very prosperous year (1) one-half the sum due from the government for services, (2) 5 per cent. of its net earnings, and (3) \$850,000. In a poor year it would pay (1) one-half the sum due for services to the government, a moderately constant sum; (2) 5 per cent. of a smaller amount of net earnings; and (3) a part of \$850,000, or, if (1) equaled 20 per cent. of the net earnings, none of it. Thus there were two upper limits prescribed for the payments into the sinking-fund.

The provision for payments by the Central Pacific were the same except that the sum \$850,000 was increased to \$1,200,000. The remainder of the Pacific railways were omitted from the provisions of the act.

This sinking-fund was to be applied to the payment of the first-mortgage bonds at their maturity and, if anything remained thereafter, to the liquidation of the subordinate liens.

To a mind untrained in legal subtleties it would seem that the Thurman Act was an encroachment by the government as sovereign lawmaker upon the rights of the railway company, for the sake of protecting the government in its rôle as creditor. It is therefore not strange that the railway companies refused to accept it without testing its constitutionality in the courts. The supreme court, in the natural course of events, passed upon the question and declared the Thurman Act to be constitutional.

¹ Sinking-Fund Cases, 99 *U. S.* 732.

This decision, however, was given by the vote of but five of the nine members of the Court. Justice Hunt, on account of illness, took no part in the decision; and Justices Field, Bradley and Strong dissented from the decision of the Court.

Justice Bradley in his dissenting opinion (99 *U. S.* 744), said: "That it is a plain and flat violation of the contract there can be no reasonable doubt."

Justice Strong, in his dissenting opinion, said: "What, then, was the contract when it was made? The government lent its bonds, and, in consideration of the loan, each company assumed five obligations: 1st, to pay the bonds at their maturity, that is, at the expiration of thirty years; 2d, to keep the railroad and telegraph line in repair and use; 3d, to furnish transmission of dispatches and transportation for the government at reasonable rates, allowing it a preference for such purposes; 4th, to apply to the payment of the bonds and interest half the compensation due to it from the government for services rendered, until the whole amount of the loan is fully paid;

But this law, even if constitutional, is open to criticism on other grounds: in its practical workings it has been a marked failure.¹ For this there are two chief reasons: the great falling off of earnings, due to increased competition for western traffic; and the failure of the sinking-fund to earn 5 per cent. compound interest.² A very ordinary degree of foresight would have predicted the former, and a slight knowledge of the bond market would have shown that the latter was a surety. The mistake of Congress in 1878 was in framing the Thurman Act without regard to the future, to meet conditions which were already passing away.

and, 5th, after the completion of the railroad, to apply to the payment of the bonds at least five per centum annually of its net earnings. The lender required and the borrower undertook nothing more (p. 732).

"Now, what has been attempted by the act of May 7, 1878? The act was passed with sole reference to this contract, and all its provisions have in view the imposition of additional obligations upon the railroad company. It does not purport to be a repeal of the charter. Its leading purpose is to take control of the property of the debtor, and sequester it for the security of a debt which, by the terms of the contract, is not due and payable for years to come (p. 734).

"Now, where is the power of Congress to add new terms to any contract made with the United States, or made between any two private individuals? Where is the power to annul vested rights? It is certainly not to be found in the Constitution (p. 736).

"Congress may at any time alter, amend, or repeal this act.' The power thus reserved is one over the act itself, not over anything that may have lawfully been done under the act, before its repeal or alteration. It is only by great confusion of things essentially distinct that this power can be construed as applicable to a contract made after the corporation came into existence. Besides, the act of 1878 does not attempt to repeal, alter or amend the acts of 1862 and 1864. It changes no franchise granted by those acts, nor does it interfere with its exercise. It interferes only with the fruits of the franchise. The right to possess and enjoy the income of the company is not a franchise. It is an incident of the ownership of the company's property, though the property may be accumulated by the use of the franchise" (p. 740).

¹ The Thurman Act sinking-fund, planned to grow fast enough to make sure of the payment at maturity of the whole debt to the government, stood thus for the Union Pacific Railroad Company at the designated dates:

December 31, 1890,	\$11,105,492.53
" " 1891,	12,274,125.19
" " 1892,	13,714,541.50
" " 1893,	15,103,838.93

Thus the average annual increase for these years is \$1,332,782.17, while the annual interest on the subsidy bonds is \$1,635,190.72.

² The United States 5 per cent. bonds were at such a premium that the investment in them yielded but 2 per cent.—*Pacific Railway Commission*, p. 989.

In 1887 came a piece of congressional legislation which was in one way important. Provision was made for the appointment of a commission of three who should investigate fully the affairs of the bond-aided railways.¹ The voluminous testimony taken by this commission makes it possible, by the expenditure of a sufficient amount of energy, to get a thorough understanding of the affairs of the Pacific railways. The commission, with its report, handed in recommendations as to legislation,² but it did not, as seemed to be hoped, succeed in finding a basis for a settlement of the differences between the roads and the government which would commend itself to Congress.

Of late years no marked changes have taken place in the condition of public opinion. Each session of Congress sees the introduction of measures which evince the same old vindictive feeling toward the Pacific railways, but which bring a settlement of the debts no nearer.

¹ 24 *Statutes at Large*, 488.

² Fiftieth Congress, first session, *Executive Document No. 51*. Nine volumes.

CHAPTER VII.

FINANCIAL HISTORY OF THE UNION PACIFIC.

In this chapter it is proposed to make a study of the financial history of the Union Pacific system, treating chiefly the years since 1880. This inquiry falls naturally into two parts: first, an examination of the income accounts of the company; and, second, an examination of the uses made of the funds collected. The figures concerning the income will show how the road has treated the communities through which it runs and to serve which it was built. By studying the distribution of those funds it will appear whether or not the men whose money built the road and those who later became holders of its securities were justly dealt with.

The first thing to be considered is the income as a whole, and its division between operating expenses and net earnings. Chart^{*} I presents these facts for the Union Pacific *Railroad* Company, whose line ran from Omaha to Ogden. The period covered is from 1870 to 1879 inclusive. The total shaded portion represents gross earnings; the lower darker portion represents oper-

^{*} It must be borne in mind in studying the charts which are made use of in explaining the financial history of the enterprise that facts of various and widely different sorts are thrown together on the same page. Some of these facts can be compared; others are wholly different, and no basis of comparison exists. For instance, areas representing gross earnings, operating expenses, and net earnings can be compared, for they are of the same sort. On the other hand, while a line represents the fluctuations of freight rates, and a line represents the fluctuations of passenger rates, and while both, by distance above the base line, represent the amount charged per ton-mile or per passenger-mile, still no comparison can be made between them. This is true for this reason: The units made use of, the ton-mile and the passenger-mile, are wholly incomparable things. Yet each of these lines is valuable as affording a basis for the comparison of rates of one sort in one year with rates of the same sort in another year. The charts will, it is hoped, if too much is not expected of them, be a considerable aid to an understanding of the facts of the financial history of the road.

ating expenses; leaving the upper, lighter portion for net earnings—that portion of the income out of which should be paid the interest on the bonded indebtedness, and, if this leaves any margin, dividends on the capital stock.

From an inspection of this chart it will be seen that in 1870 the operating expenses consumed 61.34 per cent. of the gross earnings, leaving net earnings not only relatively, but absolutely smaller than for any subsequent year in the period. In 1876, on the other hand, the operating expenses were but 40.88 per cent. of the gross earnings—the lowest per cent. reached during the period. The increase in gross earnings indicates, unless rates were rising, that the amount of business done was steadily increasing. We see, however, that rates during this period not only did not rise, but steadily fell. It is therefore evident that the traffic of the road increased even faster than the income from it. This is shown also by the lines which represent the changes in the amount of passenger traffic and freight traffic. Comparing the years 1870 and 1878, we find that while the money receipts were as 1 to 1.72, the numbers of passengers carried one mile were as 1 to 1.43, and the numbers of ton-miles of freight carried were as 1 to 5.09. Thus it appears that the community, as years went on, received a greater and greater service from the road, but did not pay to the road correspondingly increasing sums of money.

It is also noteworthy from this chart that the operating expenses remained almost constant during the years before 1879. This may in part be accounted for by the nature of the industry. Since a railway has a large amount of capital invested in road-bed and equipment, upon which investment it must pay the same interest under all circumstances, and since it must maintain a working force and pay their salaries as long as the road is operated, whether business is slack or brisk, a large share of its expense account is predetermined and independent of the amount of business done. This is a characteristic common to all industries using much fixed capital, the railway being the most striking exemplification of it.

It is also to be remembered in this connection that very few

CHART I.

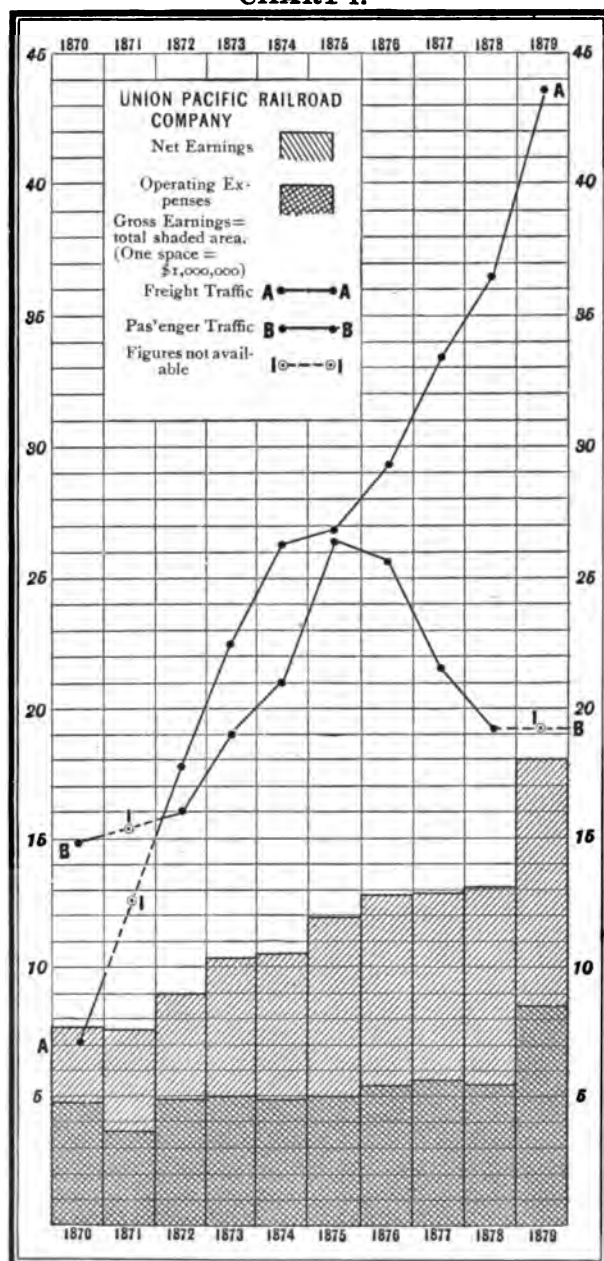
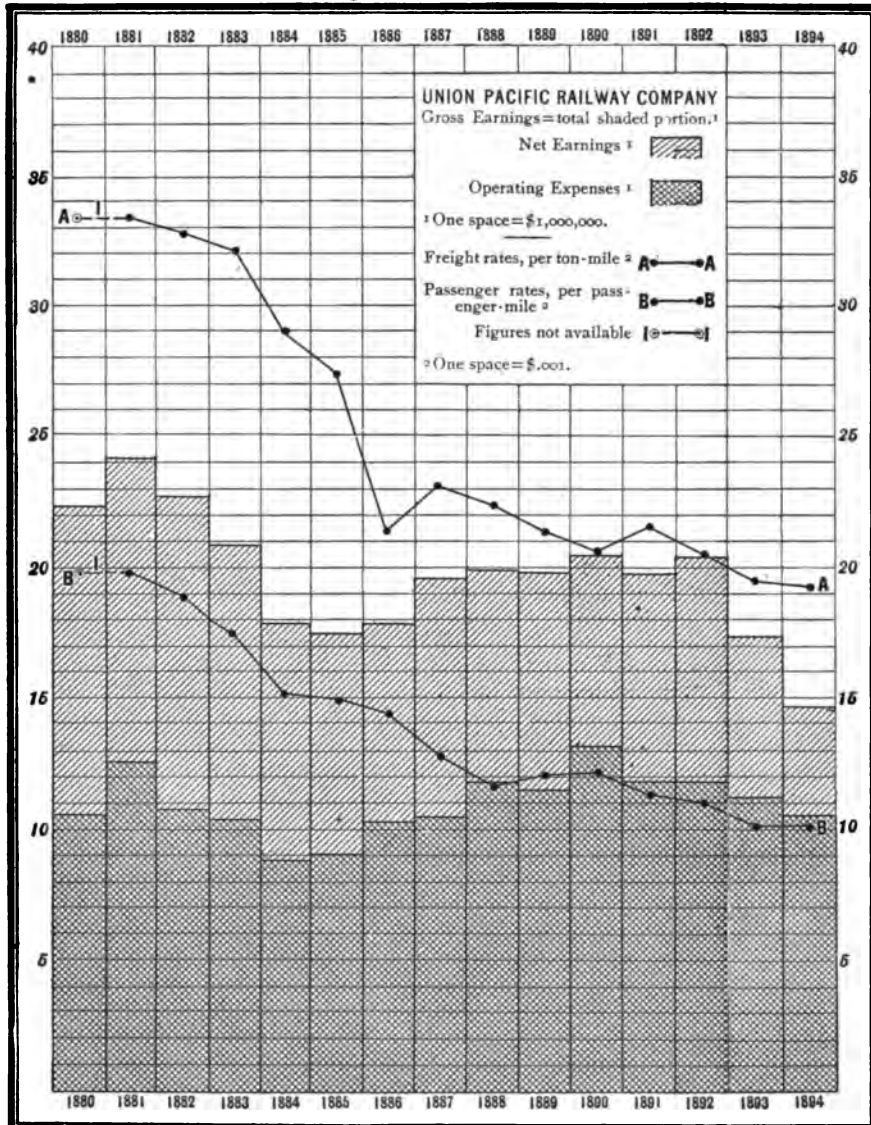


CHART II.





railways have their carrying capacity taxed to anything like the full extent, and that most of them can double their services to the community with only a slight increase of expense to themselves. When a company has created enough railway facilities to meet the normal requirements of a community, it has at the same time created the facilities for a traffic many times as large. For instance, all the traffic between Chicago and Kansas City, which is now divided among more than half a dozen roads, could be carried easily by one road. To supply local facilities to the intervening territory, all the existing roads are necessary — perhaps more; yet they could carry tenfold the present traffic and not be overtaxed.

However, this so very slight increase in the sums spent on operating expenses in the case of the Union Pacific from 1870 to 1878, while the traffic handled made such a marked growth, raises the question whether this class of expenditures was not kept down by letting the physical condition of the road decline. But as we are now concerned with the income only, and as to answer this question would require an analysis of the expenditures of the road, its consideration may be postponed for the present.

Turn now to Chart II, which represents the same set of facts for the Union Pacific *Railway* Company for the years from 1880 to 1894. It will be remembered that this company was formed in 1880 by the consolidation of the Kansas Pacific and the Denver Pacific with the original Union Pacific *Railroad* Company, the aggregate mileage of the three companies being 1842 miles of road.

This chart shows that the gross earnings were in 1880 \$22,275,655.40, that they reached their highest point in 1881, fell lowest in 1885, and were, in 1894, \$14,739,436.76. Thus the course of gross earnings was, during these fourteen years, slightly downward. The operating expenses, meanwhile, rose slightly. Thus there was a considerable decrease in the net earnings of the road. The reason for this is made evident by a glance at the lines which represent the course of freight and pas-

senger rates, the fall being very marked in each. Passenger rates fell from 3.34 cents per mile in 1881 to 1.865 cents per mile in 1894, a decrease of 45 per cent. from the standard of 1881; while freight rates dropped from 1.98 cents in 1881 to .984 cents in 1894, a decrease of 51 per cent. This difference of 6 per cent. in the rates of decrease does not, as will soon be shown, adequately indicate the greater importance of the fall in freight rates.

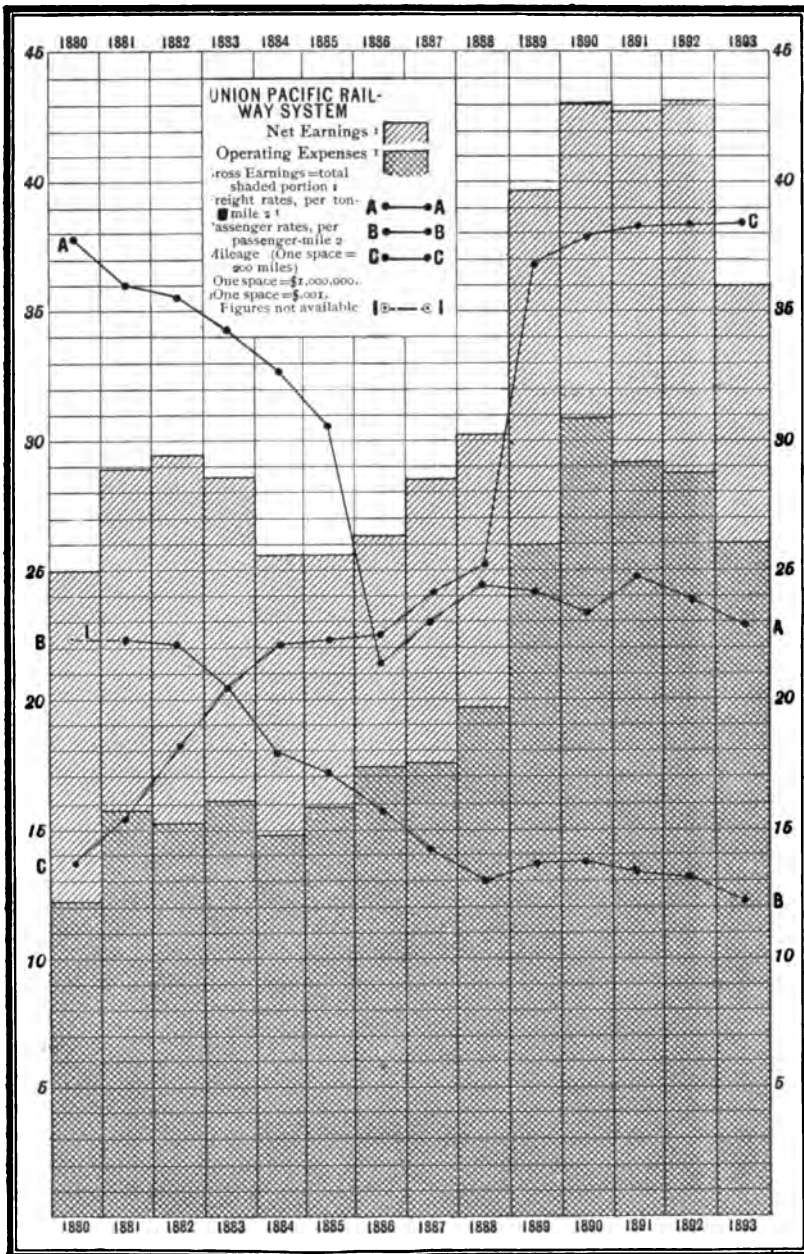
The increase in operating expenses, which is quite marked for the period beginning with 1884, probably indicates that a better quality of service was rendered as years went on.

To sum up the facts shown by Chart II: During this period the amount of services to the community was increased; the quality of service was probably raised; this service was given for lower rates. While the community gained in all these particulars the company was steadily surrendering its prosperity. And when it is said that the company lost, it is worth while to consider who is meant. The company is not a small circle of officers who conduct the affairs of a business concern whose visible body is a network of iron rails. It is not merely a soulless corporation. The Union Pacific Railway Company is rather a widely scattered body of investors, living largely in the East, whose money, invested in a certain railway property, vastly increases the productiveness of a certain section of the West.

What Chart II did for the Union Pacific Railway *Company*, Chart III does for the Union Pacific Railway *system*,—by which is meant the Company, together with all the branch lines and feeders in which the Company is interested.

The facts which drew attention in the preceding chart are here still more striking. In this one, another line has been added to show the increase in mileage. By this it appears that the mileage of 1880, 2766.30 miles, steadily grew to 7690.57 miles in 1893. Roughly following this increase in mileage is the increase in gross earnings. Together with this increase in gross earnings must be considered the fall of passenger and freight rates, as striking in the case of the system as a whole as it was with the

CHART III.



Owing to complications brought about by the Receivership, it was found impossible to include in the statements covering the financial operations of the Union Pacific Railway System the figures relating to certain lines which had previously appeared as a part of the system. Since this change in the basis of the accounts destroys their value for comparison with the figures of previous years, no account of the year 1894 is taken in the charts and tables relating to the Union Pacific Railway System. They are easily accessible in the annual report of the company to any one wishing to examine them.

The roads omitted from the accounts of 1894 are the Oregon Short Line & Utah Northern Railway Co.; the Union Pacific, Denver & Gulf Railway Co.; the Union Pacific, Lincoln & Colorado Railway Co.; the St. Joseph & Grand Island Railroad Co.; and the Kansas City & Omaha Railroad Co.



CHART IV.

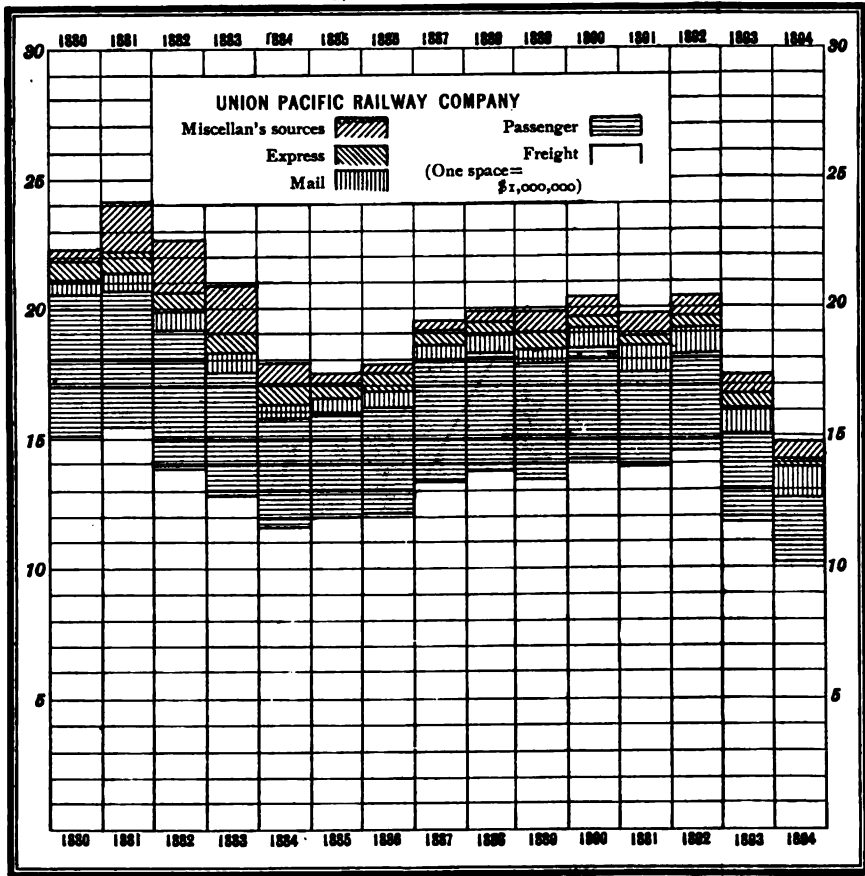
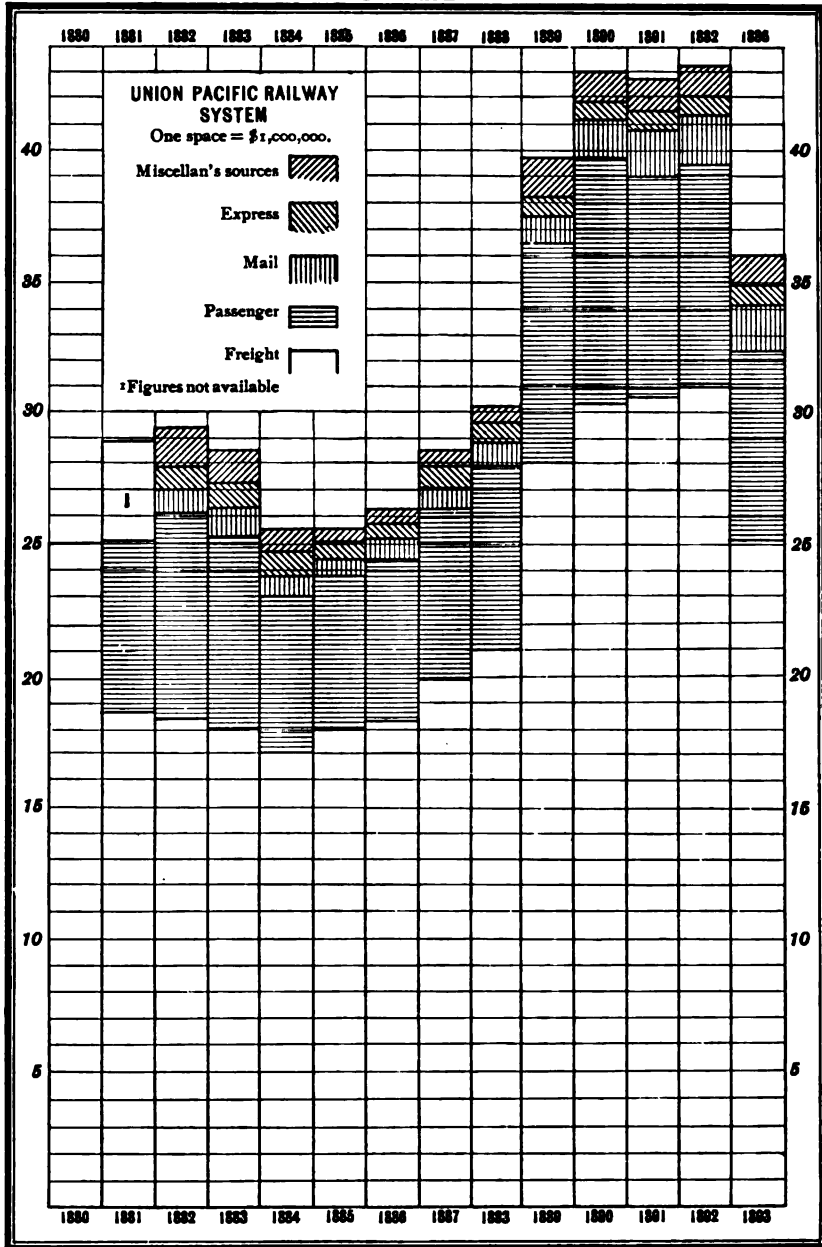




CHART V



nucleus of the system, the railway. So again we see that the traffic done for the community increased faster than the remuneration for it. A very noticeable feature of this chart is the rapid rise in operating expenses, due to the unsatisfactory nature of some of the branch lines.¹ This kept net earnings stationary throughout the period.

Again we find all the changes for the benefit of the community, and all at the expense of the road.

The income, which has thus far been taken as a whole, should now be separated into its component parts, in order to show the relative importance of the very various sums which make it up. For this purpose Charts IV and V have been constructed.

It will be noticed at once that Charts II, and IV and Charts III and V are identical in outline, the former two dealing with the gross earnings of the Union Pacific Railway *Company*, and the latter two with the gross earnings of the Union Pacific Railway *system*.

This difference is to be noted between the first three charts, and Charts IV and V. In the first set both gross earnings and operating expenses began at the base line. Here the areas are mutually exclusive. The lower one represents earnings from freight, the next earnings from passenger traffic, and above are three small areas representing earnings from mail, express, and miscellaneous sources.

Both Chart IV and Chart V show the very great preponderance of one item — freight earnings; that the passenger traffic is of very secondary importance; and that the income from mail, express, and miscellaneous sources is insignificant. It is indicated by the facts presented in these charts, and the opinion is confirmed by a further study of the question, that a western railway, if circumstances permitted it to do so, would be better off if it did no business but handling freight. Passenger rate wars are noticed by far more people than are freight rate wars, but from these charts it appears that the Pacific railways can afford to amuse themselves and the community by cutting passenger rates, while to cut freight rates is a decidedly serious matter.

¹ Alluded to where the theory of branches was discussed, page 66 above.

In studying the succeeding charts the relative importance of the items shown in Charts IV and V must constantly be borne in mind, else a false impression will be gained, for it has not seemed practicable to represent in all of them the same sum of money by the same area.

Next let us consider separately several of the sources of income, beginning with freight, it being by far the most important. For the Railway Chart VI shows, by the shaded portion, the steady and considerable increase in tonnage carried; the rates, falling rapidly until 1884 and less rapidly thereafter; the consequent marked decrease in money receipts to 1884, and thereafter the almost imperceptible recovery, ending with a falling off in 1894 of 33 per cent. from the figures of 1892.

Chart VII, representing the freight traffic for the system, shows a more rapid increase in tonnage than was shown for the railway. The rates, changing more steadily, fell off about as much for the system as for the railway. The course of money receipts was, owing to the great increase in tonnage carried, decidedly upward, although much less so than the course of the tonnage.

Charts VIII and IX, exhibiting the passenger business for the railway and the system respectively, show facts in keeping with what was seen in regard to the freight business. In both cases rates fell; as a result, the increased traffic of the railway was done for a sum absolutely less as years went on; while for the system the very greatly increased traffic was done for a sum relatively less at the end than at the beginning of the period.

It will be remembered from Charts IV and V that mail and express business brought small and regular amounts into the treasury. As nothing would be gained by a further elaboration of these facts they may be passed over. But the third of the small spaces shown in those charts, the income from miscellaneous sources, includes two items which are interesting, although far from important from a financial point of view. These are the income from the land grants of the Union Pacific Railroad and the Kansas Pacific, and from the coal mines owned by the former

CHART VI.

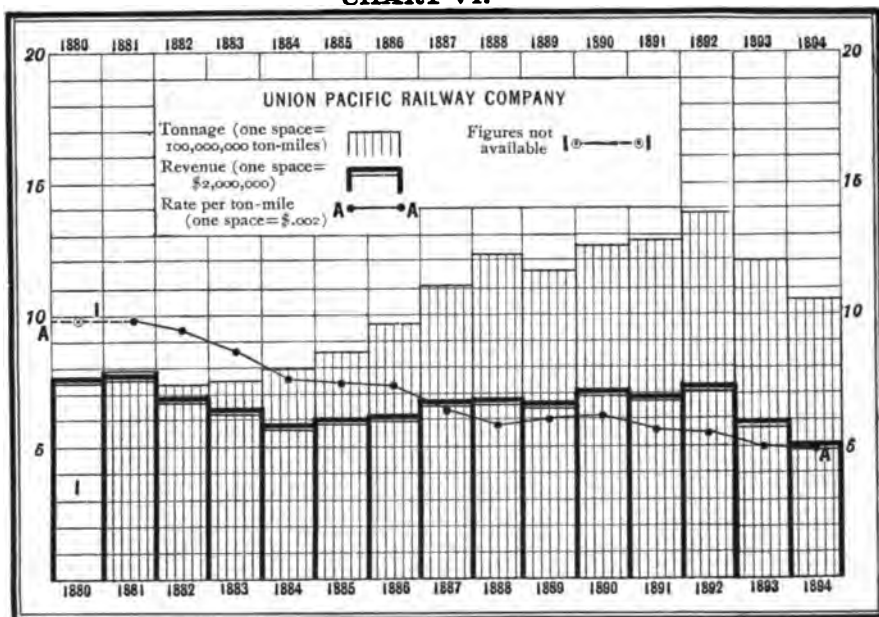




CHART VII.

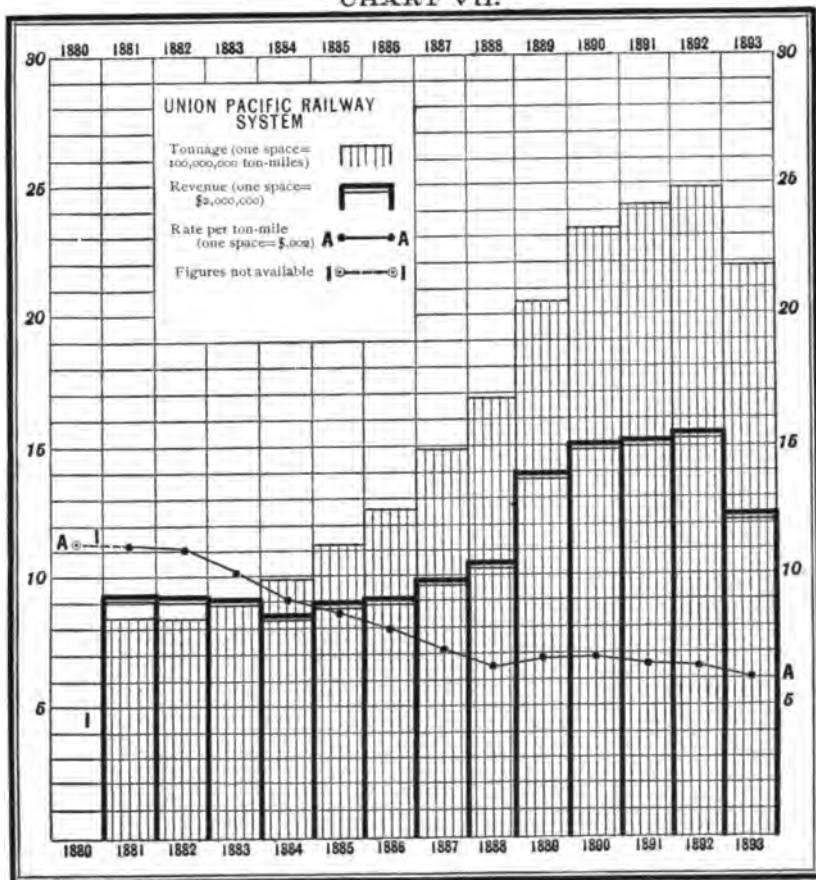


CHART VIII.

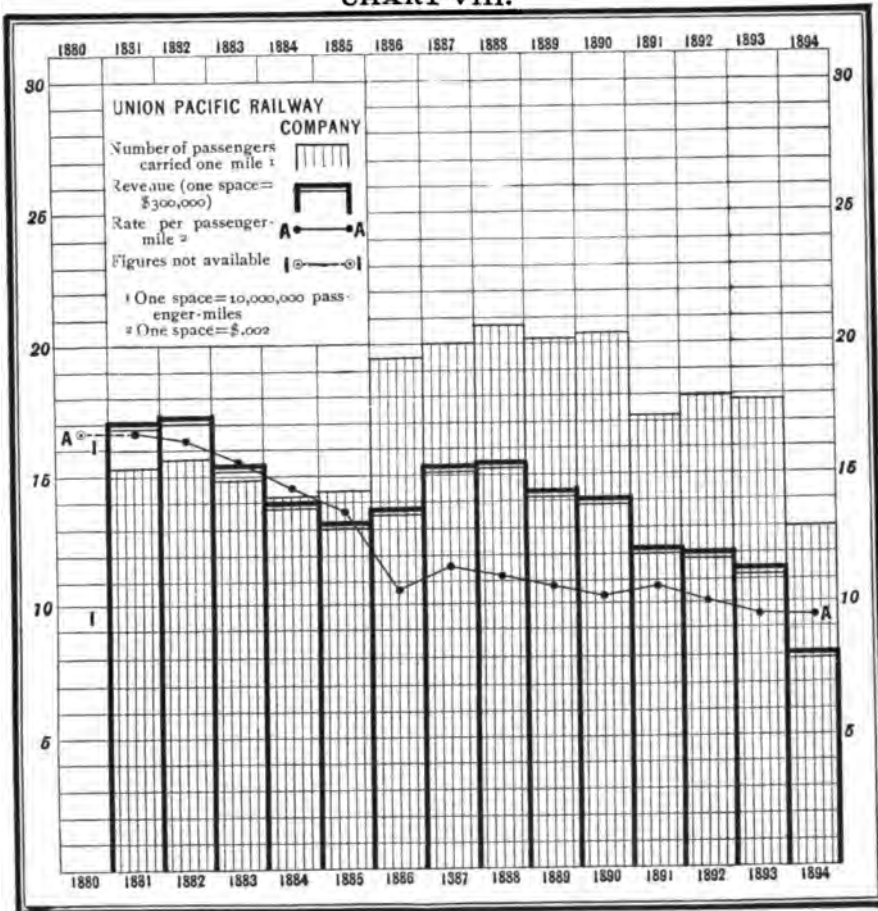
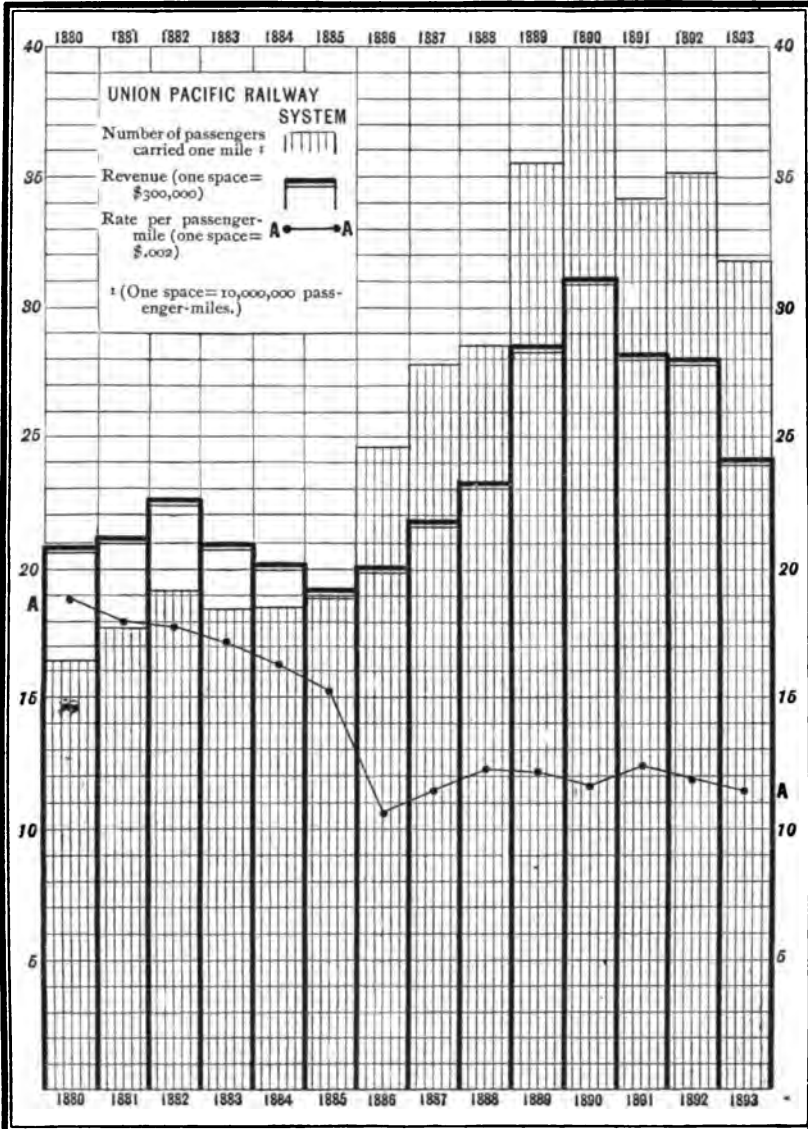


CHART IX.



road. So much has been said about the reckless munificence of the government in bestowing the land grants, and so many attacks have been made on the Union Pacific Railroad Company for its extortions practiced through the coal trade, that it is worth while to get at the facts as to the true value of these possessions to the roads.

Charts X and XI present the available facts of the history of the land grants which were given to the original Union Pacific and to the Kansas Pacific. On the former it will be noted that the highest price was paid in 1877 and that the price dropped with marvelous rapidity after 1881 to its lowest point in 1886—thus following the price of wheat. In 1887 began a rally which in 1888 carried the price almost to its former level—the effect of the boom of 1887. Then came a fall almost to the old lowest level, with a subsequent partial recovery. For three years, 1889, 1892 and 1894, the Union Pacific land department was run at a not inconsiderable loss.

The price of the lands of the Kansas Pacific ranged higher than those of the Union Pacific, its grant lying farther east and south. The fluctuations in price, moreover, were far less violent, and the tendency was decidedly upward. For 1892, 1893 and 1894 however, there was a deficit.

But the transactions of the land department were never important. For only three years on the Union Pacific and for four on the Kansas Pacific did the net proceeds from land sales reach the million-dollar point.

Still less important was the coal business of the Union Pacific Railroad Company, shown by Chart XII. The number of tons mined rose steadily; the cost tended unsteadily downward; the price, for the later years when it can be ascertained, tended downward at about the same rate as the cost, but with less violent fluctuations. The proximity of the lines representing price and cost show that the profit per ton has never been large, and the crossing of the lines in three places shows that for three years the coal properties were conducted at an actual loss. This is also shown by the sinking below the base line of the line which bounds the net earnings of the department.

The preceding discussion has pointed out the advantages which have come to the states in which the Union Pacific system ramifies, through the increase in mileage, the fall in both passenger and freight rates, and the betterment of the service rendered. Let it not be understood that these things are represented as due to the generosity of the management, or even to the far-sighted selfishness which prompts the railway manager to lower rates so as to increase traffic. All of them have come about in the course of a struggle against strong competitors for a living traffic. What has happened to the Union Pacific has happened to dozens of other roads. The difference has been that, under its peculiar handicaps, this competition has, in the case of the Union Pacific, forced matters over the danger line, and a bad season has put the road into the hands of receivers. Other roads, struggling in the same mire of unrestricted competition, have been less unfortunate and have escaped with the cutting down or the annihilation of dividends. A comparison of the expense ratios of the Union Pacific and its competitors shows that all the trans-Missouri roads are in the same class and all run on the same principles. But on account of its peculiar relations to the government the affairs of the Union Pacific have attracted much more than their just share of public attention.

With this study of the income of the Union Pacific, we come to the questions of expenditure. Have the funds of the Company been wisely and honestly expended? This is a question which it is far from easy for an outsider to answer. A study of the sums expended year after year,¹ shows, neither in their totals nor in their component parts, any fluctuations violent enough to arouse suspicion. Changes in management do not seem to have resulted in radical changes in policy, so we may perhaps infer that there were no glaring faults to be corrected.

A comparison of the expense ratios of the Union Pacific and other roads in the same region reveals nothing of moment; the differences are not wide enough to be significant. It might be

¹ See tables facing p. 124, Appendix.

CHART X.

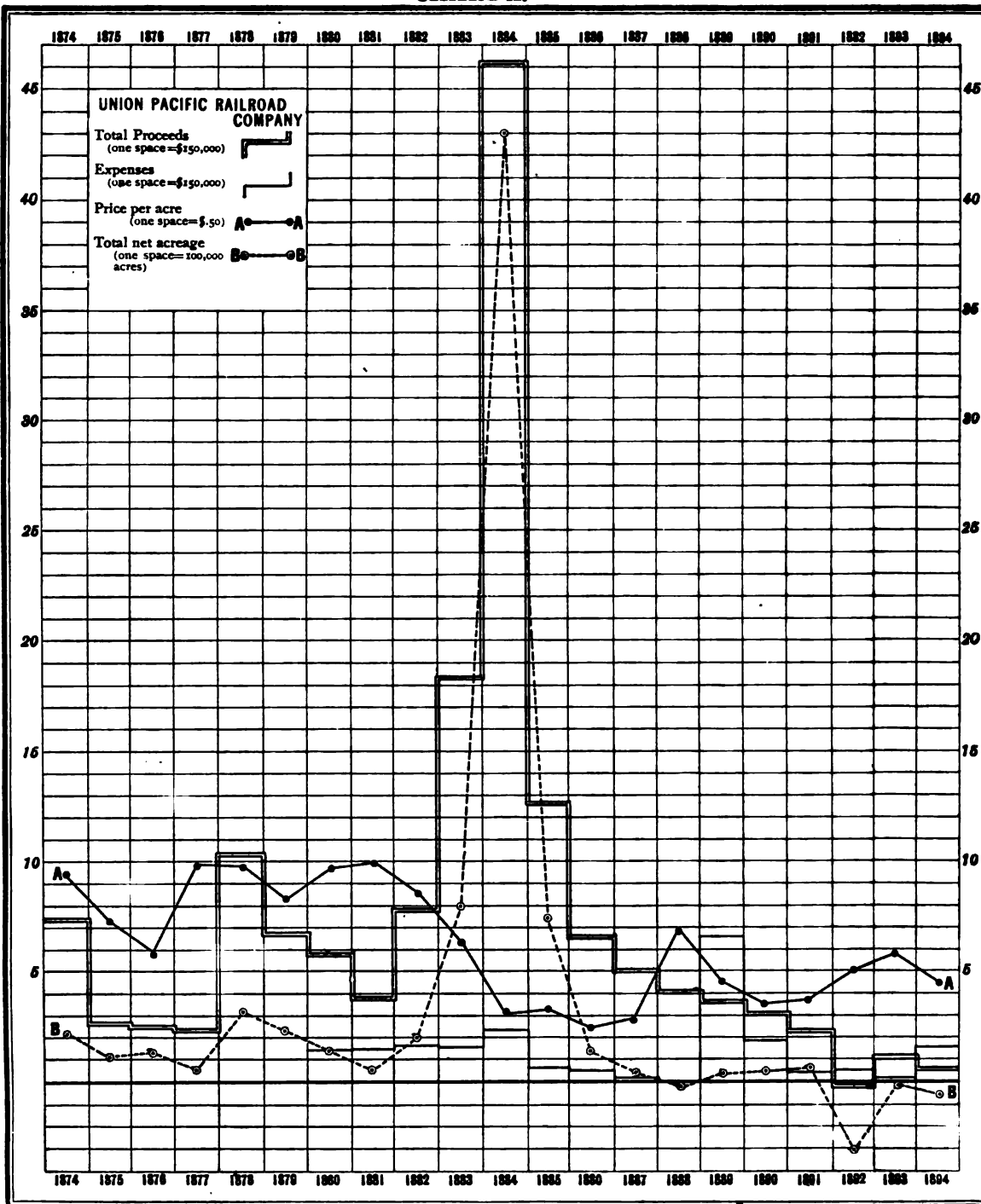
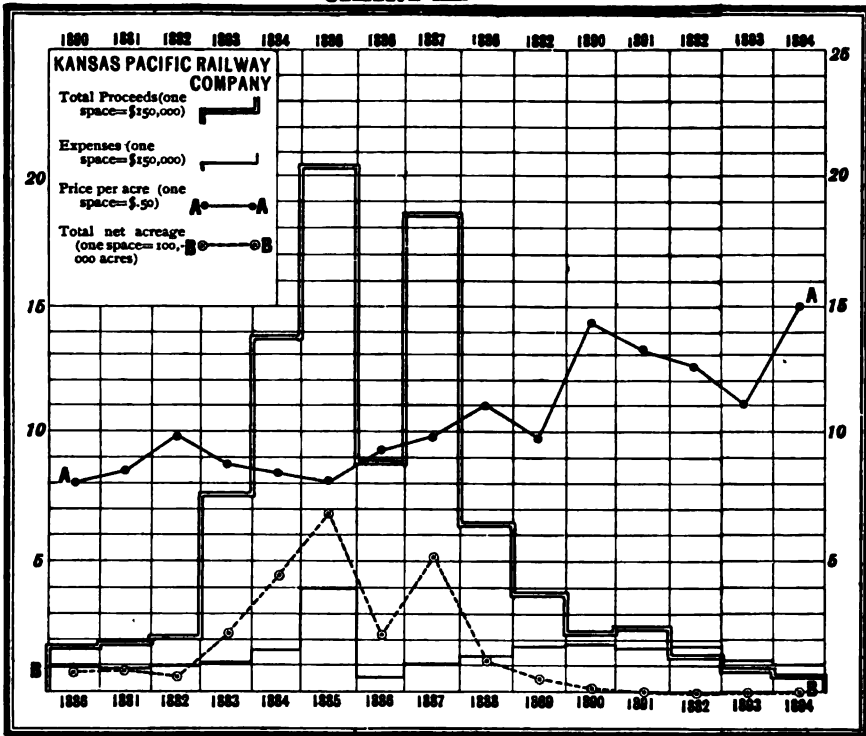
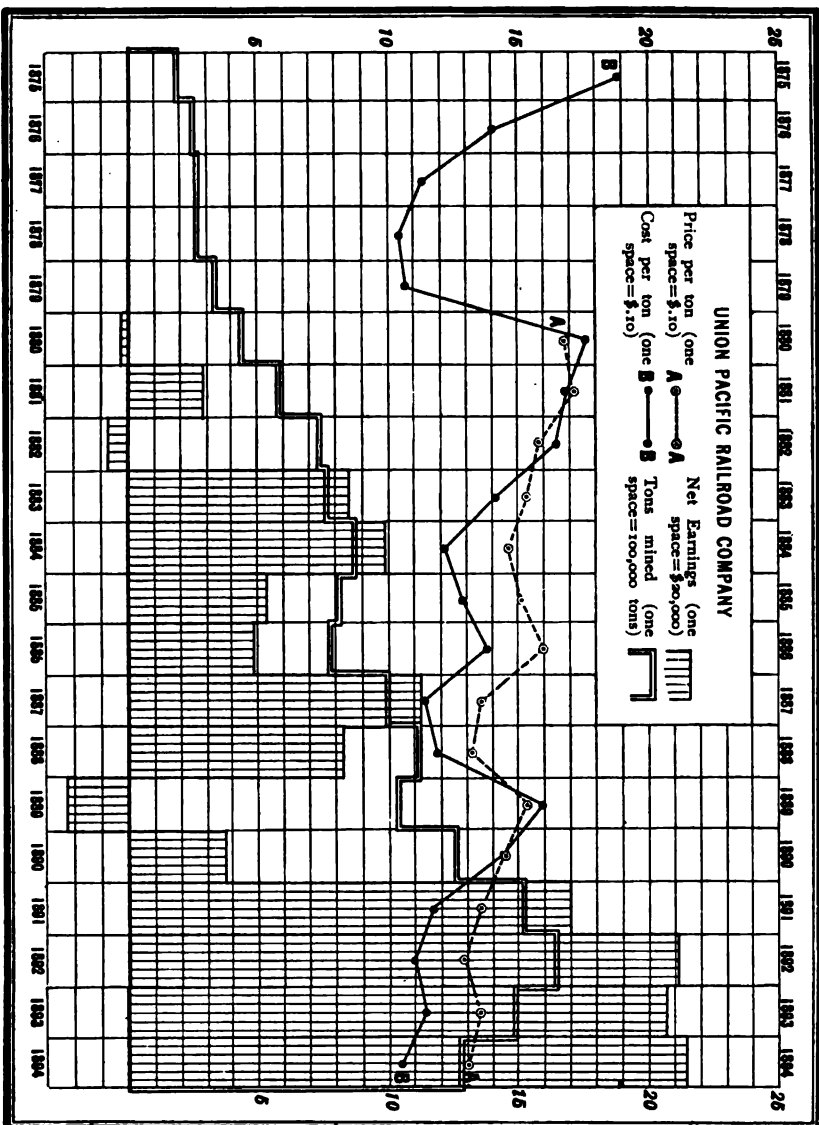


CHART XL



44

CHART XII.





possible to learn something by a more minute comparison of the accounts of the Union Pacific and its competitors, *if* railway accounting had been reduced to a science. But each road has developed its own system of bookkeeping, no two systems are alike, no two roads distribute the items of expenditure among the various heads in the same way, and hence no comparison is possible.²

Bearing in mind, then, that only an expert accountant, with the greatest facilities for investigating and unlimited time, could say positively that the figures presented to the public by the Union Pacific Company have or have not been made to hide fraud, it is safe to say this at least: The funds of the Union Pacific seem to have been spent properly.

A study of the fluctuations of the funded debt of the system is still more remotely indicative of the real state of affairs, but does not alter the conclusion already reached. The growing debt can be explained only by the expansion in mileage, and that expansion we have already commended. But the commendation was given on the supposition that the expense was to be borne out of profits which might otherwise have gone to dividends. Whether expansion would be wise when it necessitated the issue of new bonds is another matter, and the fate of the Atchison system is a striking argument against it. But what evidence can be gotten at does not point to any very radical faults in the line of expansion. If anything in the case of the Union Pacific is legitimate ground for complaint, it is the manipulation of the price of its securities. That, however, is not a matter of railway management, but of Wall Street speculation.

² This unsatisfactory state of affairs, however, is disappearing under the influence of the Interstate Commerce Commission.

CHAPTER VIII.

PROPOSALS FOR SETTLEMENT AND PRESENT STATUS.

The government of the United States, as creditor of the Pacific railways, is constantly liable to be drawn into disputes which involve it, the sovereign, in contests before its own courts with its creatures, the railway companies. The government, as supreme lawmaker, is also constantly tempted to alter its status as one of the parties to a contract, by altering the laws which govern the railways—as it certainly seems to have done in the case of the Thurman Act. The undesirable features of such a case, an attempt to mix politics and business, are too evident to need enumeration. They have from the beginning impressed every student of the situation, and particularly the men who have been obliged to conduct the business affairs of the roads under these untoward influences. In consequence, the owners of the properties have, at various times, offered to provide for the payment of the debts before their maturity, if they could by so doing be freed from all connection with the government. As several of these offers were eminently fair and made by men who could have executed them without difficulty, it is at first surprising that they were not accepted. But the difficulty is always present that no one man or small body of men can negotiate in behalf of the government and bind it to a bargain. There is required the concurrent action of both houses of Congress and the President, and to get such action requires an amount of agitation the energy for which no one has as yet been able to spare. Consequently, with the first of the subsidy bonds already due, the Pacific railway problem is still unsolved.

Soon after Gould took hold of the Union Pacific and before he had begun to buy Kansas Pacific, he and General G. M.

Dodge formulated two plans for the settlement of the government claims on the Union Pacific. These plans, made before the dividend-paying period began, were based on the earning capacity which the road had thus far been able to develop; they contemplated nothing more than the payment of the debt within twenty years of its maturity. There was then almost as much doubt of the possibility of performing this feat as there is now, but that is not what defeated the plans. It was the baneful influence of Wall Street which induced the government officials to reject the offers.¹

February 10, 1875, Mr. Dillon, president of the Union Pacific, submitted to the Secretary of the Treasury an offer to pay \$500,000 per year for twenty years, and thereafter \$750,000 per year, these sums to be put into a sinking-fund, and the 6 per cent. interest thereon to be compounded semi-annually until the whole amount accumulated equaled the whole of the debt to the government.² Again the government let an opportunity for a settlement slip through its fingers.

The dispatches from Washington of February 18, 1875, con-

¹ General Grenville M. Dodge: "When Mr. Gould came into the road he commenced giving it [the payment of the debt to the government] a good deal of consideration, and we formulated a plan—two plans; it is impossible for me to state exactly what they were, but I can give the substance. One was a plan in which we calculated the present value of the debt and agreed to make a payment that would pay that debt off in a certain length of time. Another plan was one by which we agreed to pay so much per year that should be made a sinking-fund, and increase upon the gross earnings. I went to Washington with the propositions, and went before the Secretary of the Treasury, Mr. Bristow, and called his attention to it; I got him to consider it; he took it up and made some changes in it; it was then taken before the Cabinet; it was approved; I went with it before the President, General Grant, and he approved it; and they wrote their messages, and were about to present them to Congress, when it commenced getting into the papers. There was an immense short interest in Union Pacific stock, and they sent representatives to Washington who went to General Grant and made him believe that this proposition of the company was for the purpose of booming the stock, and that laid the plan by. General Grant has told me a great many times since that he regretted very much that he did not put the matter before Congress and settle the thing then. The proposition that we made then would, I think, have paid the debt off within twenty years after it was due."—*Pacific Railway Commission*, p. 3815-6.

² *Commercial and Financial Chronicle*, February 13, 1875.

tain a letter of Vice-President C. P. Huntington of the Central Pacific, offering to pay semi-annually \$200,000, interest to be compounded as in the Union Pacific offer, these payments to be continued until the government claim was met.¹ This offer was embodied in a bill and presented by Senator Edmunds,² but shared the same fate as the preceding one.

Again, while the Thurman Act was pending, Jay Gould offered to pay in cash the present worth of the whole subsidy debt of the Union Pacific.³ The answer of the government was the passage of the Thurman Act.

Charles Francis Adams, in 1887, voicing the opinions of the stockholders of the Union Pacific, approved such a plan as Gould had formulated, and said that a basis for settlement would soon be found if an offer was made to set the road free from government interference.⁴

Various other expressions of like purport have been made from time to time, but in less definite form, so they need not be enumerated. But enough has been said to indicate the constant hope on the part of the railway that the hampering partnership with the government might be dissolved.

Proposals for altering the relations between the Pacific railways and the government have come more frequently from the government than from the roads. These proposals have been so numerous that it is not worth while to detail them individually, and as they fall into two classes this is unnecessary. Of the first class, those depending on a sinking-fund for the payment of the debt, the Thurman Act may serve as a type. As this law has received sufficient consideration, we may pass to the second class.

This class, where a refunding of the debt is provided for, may be represented by the Hoar Bill, introduced into the Senate January 21, 1885. This provided that the present worth of

¹ *Commercial and Financial Chronicle*, February 20, 1875.

² Forty-fourth Congress, first session, vol. iv, p. 2149.

³ *Pacific Railway Commission*, p. 510-1.

⁴ *Ibid.*, p. 991-6.

the debt should be calculated ; that 120 bonds equal in amount and aggregating the present worth of the debt should be drawn up ; that these bonds, bearing 3 per cent. interest, should fall due at half-yearly periods ; that the security given under the Acts of 1862 and 1864 for the payment of the subsidy bonds should be the security for the payment of these new bonds by which the old were replaced ; that default on the payment of any one of these bonds for six months after its maturity should be ground for foreclosure.¹ Congress was not yet ready to adopt such a plan for settlement, so the proposal came to naught.

In April 1894, Attorney-General Olney formulated a plan for dealing with the debt of the Union Pacific which combines some of the features of both the classes mentioned above. It provides for (1) the retention of the Union Pacific organization, and (2) a refunding of the debt. The details of this latter feature of the scheme are these: The present value of the debt (July 1, 1894) is to be ascertained, and bonds of the Union Pacific Railway Company received for that sum. These bonds are to bear 2 per cent. interest and to run 100 years. They are to constitute a second mortgage on the whole property of the Union Pacific system—bond-aided portions and branches, real, personal and mixed property. Beginning with 1905, \$1,650,000 annually is to be paid into a sinking-fund, and default for six months is to be cause for foreclosure. The first-mortgage bonds are also to be refunded at a lower rate of interest. (3) A third mortgage is also allowed, for the purpose of keeping up the physical condition of the property and meeting such emergencies as may arise. The issue of this mortgage is limited by the provision that fixed charges must never rise above \$8,500,000, which is \$4,000,000 or \$5,000,000 less than they now are.

Later in the session this plan was somewhat changed by its author, and finally rejected. This result was largely due to the efforts of the California members, whose bitterness against the Southern Pacific Company seemed to be the chief motive.

¹ Forty-eighth Congress, second session, p. 1074.

The reorganization committee of the bondholders, with Senator Brice as chairman, having failed to get the legislation which was needed, returned the bonds which had been deposited with them, and abandoned their task.

What is the present status of the Union Pacific? and what are the stumbling-blocks in the way to a settlement between the company and the government? As we have already said,¹ the road is in the hands of receivers,² and foreclosure suits are pending which affect almost the whole mileage of the system. Its indebtedness is as follows:

	Bonds Outstanding	Owned by Union Pacific
Union Pacific and Kansas Pacific	\$78,469,785.00	\$2,578,000.00
United States Bonds issued to Union Pacific and Kansas Pacific	33,539,512.00	
Interest on United States Bonds, balance of account	18,193,197.97	
Total Union Pacific Railway	\$130,202,494.97	
Operated Roads, total	140,494,772.04	32,815,500.00
Total Owned and Operated Roads...	\$270,697,267.01	\$35,393,500.00
	Owned by other Companies in the System	Afloat
Union Pacific and Kansas Pacific		\$75,891,785.00
United States Bonds issued to Union Pacific and Kansas Pacific		33,539,512.00
Interest on United States bonds, balance of account		18,193,197.97
Total Union Pacific Railway		\$127,624,494.97
Operated Roads, total	\$12,149,180.00	95,530,092.04
Total Owned and Operated Roads...	\$12,149,180.00	\$223,154,587.01

The problem is, then, how to reorganize a railway system with such earning capacity as was shown in the preceding

¹ Page 67, above.

² Appointed October 13, 1893, on an application signed by the executors of the will of Frederick L. Ames. The receivers named were S. H. H. Clark, President of the road; Oliver W. Mink, Controller of the road, and E. Ellery Anderson, one of the government directors. At a later date J. W. Doane and Frederick R. Coudert were added, representing the government interest and securing to the government a majority of the receivers.

chapter ; over-capitalized, and burdened with an enormous weight of interest charges ; with a history highly peculiar, which, being but poorly understood, has induced a strong prejudice against the road. This last feature ought not to figure in the case in the slightest degree—the reorganization should be purely a business affair,—but any one who has followed the action of Congress concerning the Pacific railways in the past will be sure that this element will enter. It is certain, however, that the more fully the history of the road is understood, the more will this prejudice sink into the background.

What, then, ought to be the lines upon which a plan of reorganization should be constructed ?

First of all, any agreement for a settlement should be negotiated with the intention of separating the railway from the government—setting it free from all governmental interference, making it impossible to manipulate the stock market by means of congressional agitation. The introduction of a bill or a resolution attacking the Pacific railways is sure to make itself felt on the stock exchange. The importance of this is evident when we consider that a change of one point varies the value of the Union Pacific stock over \$360,000, and congressional action has in one month sent the stock down nearly 20 points. This evil is the first to be gotten rid of. The government must take the same position as any other creditor.

Second ; the offer made by the government must be such as to appeal to the self-interest of the road. The time for paying the debt must be extended and the rate of interest must be lowered. Since the debt cannot be paid at maturity, concessions must be made by the government as a basis for demanding others from the road.

Third ; the road must, in return for the extension of time and the lowering of interest, give the government a better security than it now has. At present the lien of the government lies only on the bond-aided portions of the system—not on the Union Pacific terminals, nor on the Kansas Pacific terminals ; on only a part of the line of the Kansas Pacific ; on no part of the Denver

Pacific, on none of the branch lines. The road must be induced to secure the debt by putting a blanket mortgage on the whole system. This it was willing to do some years ago, whether it is so now or not.

Fourth, the provision for the payment to the government of a percentage of net earnings must be abolished. This necessitates governmental inspection and interference, and induces disputes. The payments must be predetermined amounts, so that the company can forecast the demands to be made upon it.

APPENDIX I.

ACTS CHARTERING THE UNION PACIFIC RAILWAY.

An Act to aid in the construction of a Railroad and Telegraph Line from the Mississippi River to the Pacific Ocean, and to secure to the Government the use of the same for Postal, Military, and other purposes.

[SECTION 1 names 158 men, from twenty-four states and one territory, who, "together with five commissioners to be appointed by the Secretary of the Interior, and all persons who shall or may be associated with them, and their successors," are incorporated under the title of The Union Pacific Railroad Company. It provides that "the capital stock of said company shall consist of one hundred thousand¹ shares of one thousand dollars¹ each, which shall be subscribed for and held in not more than two hundred shares by any one person."¹ The 163 persons referred to above are constituted the "Board of Commissioners of the Union Pacific Railroad and Telegraph Company," a modification of the name previously used, and the organization of the Board is directed to take place within three months. Books for subscriptions of stock are to be opened, and 10 per cent. on such subscriptions required in cash. The next sentence provides that when 2000 shares are subscribed for and ten dollars per share paid in—1 per cent., not 10 per cent.,—the Board shall call a meeting of the stockholders, at which meeting there shall be elected not less than thirteen² directors. The duties of the Board terminate with the formalities connected with this first election, and the Board ceases to exist. Thereafter the stockholders constitute the company.]

At the time of the first and each triennial election of directors by the stockholders, two³ additional directors shall be appointed by the President of the United States, who shall act with the body of directors, and to be denominated directors on the part of the Government; any vacancy happening in the Government directors at any time may be filled by the President of the United States. The directors to be appointed by the President shall not be stockholders in the Union Pacific Railroad Company. The directors so chosen shall, as soon as may be after their election, elect from their own number a president and vice president, and shall also elect a treasurer and secretary.

¹ Amended by sec. 1 of the Act of 1864. See page 110 below.

² Amended by sec. 13 of the Act of 1864. See page 113 below.

³ *Ibid.*

No person shall be a director in said company unless he shall be a *bona fide* owner of at least five¹ shares of stock in the said company, except the two directors to be appointed by the President as aforesaid.

SEC. 2. *And be it further enacted*, That the right of way through the public lands be, and the same is, hereby granted to the said company for the construction of said railroad and telegraph line, and the right, power, and authority is hereby given to said company to take from the public lands adjacent to the line of said road, earth, stone, timber and other materials for the construction thereof; said right of way is granted to said railroad to the extent of two hundred² feet in width on each side of said railroad where it may pass over the public lands, including all necessary ground for stations, buildings, workshops, and depots, machine shops, switches, side tracks, turntables, and water stations. The United States shall extinguish as rapidly as may be the Indian titles to all lands falling under the operation of this act and required for the said right of way and grants hereinafter made.

SEC. 3. *And be it further enacted*, That there be, and is hereby granted to the said company, for the purpose of aiding in the construction of said railroad and telegraph line, and to secure the safe and speedy transportation of the mails, troops, munitions of war, and public stores thereon, every alternate section of public land, designated by odd numbers, to the amount of five³ alternate sections per mile on each side of railroad, on the line thereof, and within the limits of ten⁴ miles on each side of said road, not sold, reserved, or otherwise disposed of by the United States, and to which a preëmption or homestead claim may not have been attached, at the time the line of said road is definitely fixed: *Provided*, That all mineral lands⁴ shall be excepted from the operation of this act; but where the same shall contain timber, the timber thereon is hereby granted to said company. And all such lands, so granted by this section, which shall not be sold or disposed of by said company within three years after the entire road shall have been completed, shall be subject to settlement and preëmption, like other lands, at a price not exceeding one dollar and twenty-five cents per acre, to be paid to said company.

SEC. 4. *And be it further enacted*, That whenever said company shall have completed forty⁵ consecutive miles of any portion of said railroad and telegraph line, ready for the service contemplated by this act, and supplied by all necessary drains, culverts, viaducts, crossings, sidings, bridges, turnouts,

¹ Amended by sec. 1 of the Act of 1864.

² Amended by sec. 3 of the Act of 1864. See page 110 below.

³ *Ibid.*, sec. 4.

⁴ *Ibid.*, sec. 4.

⁵ *Ibid.*, sec. 10.

watering places, depots, equipments, furniture, and all other appurtenances of a first class railroad, the rails and all the other iron used in the construction and equipment of said road to be American manufacture of the best quality, the President shall appoint three commissioners to examine the same and report to him in relation thereto; and if it shall appear to him that forty³ consecutive miles of said railroad and telegraph line have been completed and equipped in all respects as required by this act, then, upon certificate of said commissioners to that effect, patents shall issue conveying the right and title to said lands to said company, on each side of the road as far as the same is completed, to the amount aforesaid, and patents shall in like manner issue as each forty miles of said railroad and telegraph line are completed, upon certificate of said commissioners. Any vacancies occurring in said board of commissioners by death, resignation or otherwise, shall be filled by the President of the United States: *Provided*, however, That no such commissioners shall be appointed by the President of the United States unless there shall be presented to him a statement, verified on oath by the president of said company, that such forty miles have been completed, in the manner required by this act, and setting forth with certainty the points where such forty miles begin and where the same end; which oath shall be taken before a judge of a court of record.

SEC. 5. *And be it further enacted*, That for the purposes herein mentioned the Secretary of the Treasury shall, upon the certificate in writing of said commissioners, of the completion and equipment of forty² consecutive miles of said railroad and telegraph, in accordance with the provisions of this act, issue to said company bonds of the United States of one thousand dollars each, payable in thirty years after date, bearing 6 per centum per annum interest (said interest payable semi-annually), which interest may be paid in United States treasury notes or any other money or currency which the United States shall have or shall declare lawful money and a legal tender, to the amount of sixteen of said bonds per mile for such section of forty¹ miles; and to secure the repayment of the United States, as hereinafter provided, of the amount of said bonds so issued and delivered to said company, together with all interest thereon which shall have been paid by the United States, the issue of said bonds and delivery to the company shall *ipso facto* constitute a first¹ mortgage on the whole line of railroad and telegraph, together with the rolling stock, fixtures and property of every kind and description, and in consideration of which said bonds may be issued; and on the refusal or failure of said company to redeem said bonds, or any part of them, when required to do so by the Secretary of the Treasury, in accordance with the provisions of this act, the said road, with all the rights, functions, immunities and appurtenances thereunto belonging, and also all lands granted to the said company by the United

¹ Amended by sec. 10 of the Act of 1864. See page 112 below.

States, which, at the time of said default, shall remain in the ownership of said company, may be taken possession of by the Secretary of the Treasury, for the use and benefit of the United States: *Provided*, This section shall not apply to that part of any road now constructed.

SEC. 6. *And be it further enacted*, That the grants aforesaid are made upon condition that said company shall pay the bonds at maturity, and shall keep said railroad and telegraph line in repair and use, and shall at all times transmit dispatches over said telegraph line, and transport mails, troops and munitions of war, supplies, and public stores upon said railroad for the Government, whenever required to do so by any department thereof, and that the Government shall at all times have the preference in the use of the same for all purposes aforesaid (at fair and reasonable rates of compensation, not to exceed the amounts paid by private parties for the same kind of service); and all compensation for services rendered for the government shall be applied to the payment of said bonds and interest until the whole amount is fully paid. Said company may also pay the United States, wholly or in part, in the same or other bonds, Treasury notes, or other evidences of debt against the United States, to be allowed at par; and after said road is completed, until said bonds and interest are paid, at least 5 per centum of the net earnings of said road shall also be annually applied to the payment thereof.

SEC. 7. *And be it further enacted*, That said company shall file their assent to this act, under the seal of said company, in the Department of the Interior, within one year after the passage of this act, and shall complete the railroad and telegraph from the point of beginning as herein provided, to the western boundary of Nevada territory before the first day of July, one thousand eight hundred and seventy-four:¹ *Provided*, That within two¹ years after the passage of this act said company shall designate the general route of said road, as near as may be, and shall file a map of the same in the Department of the Interior, whereupon the Secretary of the Interior shall cause the lands within fifteen miles of said designated route or routes to be withdrawn from preëmption, private entry, and sale; and when any portion of said route shall be finally located, the Secretary of the Interior shall cause the said lands hereinbefore granted to be surveyed and set off as fast as may be necessary for the purpose hereinbefore named: *Provided*, That in fixing the point of connection of the main trunk with the eastern connections, it shall be fixed at the most practical point for the construction of the Iowa and Missouri branches, as hereinafter provided.

SEC. 8. *And be it further enacted*, That the line of said railroad and telegraph shall commence at a point on the one-hundredth meridian of longitude

¹ Amended by sec. 5 of the Act of 1864. See page 111 below.

west from Greenwich, between the south margin of the Republican river and the north margin of the valley of the Platte river, in the Territory of Nebraska, at a point to be fixed by the President of the United States, after actual surveys; thence running westerly upon the most direct, central, and practicable route, through the territories of the United States to the western boundary of the Territory of Nevada, there to meet and connect with the line of the Central Pacific Railroad Company of California.

SEC. 9. *And be it further enacted*, That the Leavenworth, Pawnee, and Western Railroad Company of Kansas are hereby authorized to construct a railroad and telegraph line from the Missouri river at the mouth of the Kansas river, on the south side thereof, so as to connect with the Pacific Railroad of Missouri, at the aforesaid point, on the one-hundredth meridian of longitude west from Greenwich, as herein provided, upon the same terms and conditions in all respects as are provided in this act for the construction of the railroad and telegraph line first mentioned, and to meet and connect with the same at the meridian of longitude aforesaid; and in case the general route or line of road from the Missouri river to the Rocky mountains should be so located as to require a departure northwardly from the proposed line of said Kansas Railroad shall be made so as to conform thereto; and said railroad through Kansas shall be so located between the mouth of the Kansas river, as aforesaid, and the aforesaid point, on the one-hundredth meridian of longitude, that the several railroads from Missouri and Iowa, herein authorized to connect with the same, can make connection within the limits prescribed in this act, provided the same can be done without deviating from the general direction of the whole line to the Pacific coast. The route in Kansas west of the meridian of Fort Riley, to the aforesaid point, on the one-hundredth meridian of longitude, to be subject to the approval of the President of the United States, and to be determined by him on actual survey. And said Kansas company may proceed to build said railroad to the aforesaid point, on the one-hundredth meridian of longitude west from Greenwich, in the Territory of Nebraska. The Central Pacific Railroad Company of California, a corporation existing under the laws of the State of California, are hereby authorized to construct a railroad and telegraph line from the Pacific coast, at or near San Francisco, or the navigable waters of the Sacramento river, to the eastern boundary of California, upon the same terms and conditions in all respects, as are contained in this act for the construction of said railroad and telegraph line first mentioned, and to meet and connect with the first mentioned railroad and telegraph line on the eastern boundary of California. Each of said companies shall file their acceptance of the conditions of this act in the Department of the Interior within six months after the passage of this act.

SEC. 10. *And be it further enacted*, That the said company chartered by the state of Kansas shall complete one hundred miles of their said road,

commencing at the mouth of the Kansas river, as aforesaid, within two years after filing their assent to the conditions of this act as herein provided, and one hundred miles per year thereafter until the whole is completed, and the said Central Pacific Railroad of California shall complete fifty miles of their said road within two years after filing their assent to the provisions of this act, as herein provided, and fifty¹ miles per year thereafter until the whole is completed; and after completing their roads, respectively, said companies, or either of them, may unite upon equal terms with the first named company in constructing so much of said railroad and telegraph line and branch railroads and telegraph lines in this act hereinafter mentioned, through the territories from the state of California to the Missouri river, as shall then remain to be constructed, on the same terms and conditions as provided in this act in relation to the said Union Pacific Railroad Company. And the Hannibal and St. Joseph Railroad, the Pacific Railroad Company of Missouri, and the first named company, or either of them, on filing their assent to this act, as aforesaid, may unite upon equal terms, under this act, with the said Kansas company, in constructing said railroad and telegraph, to said meridian of longitude, with the consent of said State of Kansas, and in case said first named company shall complete their line to the eastern boundary of California before it is completed across said State by the Central Pacific Railroad Company of California, said first named company is hereby authorized to continue in constructing the same through California, with the consent of said State, upon the terms mentioned in this act, until said roads shall meet and connect, and the whole line of said railroad is completed; and the Central Pacific Railroad Company of California, after completing its road across said State, is authorized to continue the construction of said railroad and telegraph through the Territories of the United States² to the Missouri river, including the branch roads specified in this act, upon the routes hereinbefore and hereinafter indicated, on the terms and conditions provided in this act in relation to the said Union Pacific Railroad Company, until said roads shall meet and connect, and the whole line of said railroad and branches and telegraph is completed.

SEC. 11. *And be it further enacted*, That for three hundred miles of said road most mountainous and difficult of construction, to wit: one hundred and fifty miles westwardly from the eastern base of the Rocky mountains, and one hundred and fifty miles eastwardly from the western base of the Sierra Nevada mountains, said points to be fixed by the President of the United States, the bonds to be issued to aid in the construction thereof shall be treble the number per mile hereinbefore provided, and the same shall be issued, and the lands herein granted be set apart, upon the construction of

¹ Amended by sec. 5 of the Act of 1864. See page 111 below.

² *Ibid.*, sec. 16.

every twenty miles thereof, upon the certificate of the commissioners aforesaid that twenty consecutive miles of the same are completed; and between the sections last named of one hundred and fifty miles each, the bonds to be issued to aid in the construction thereof, shall be double the number per mile first mentioned, and the same shall be issued and the lands herein granted be set apart, upon the construction of every twenty miles thereof, upon the certificate of the commissioners as aforesaid that twenty consecutive miles of the same are completed: *Provided* that no more than fifty thousand of said bonds shall be issued under this act to aid in constructing the main line of said railroad and telegraph.

SEC. 12. . . . The track upon the entire line of railroad and branches shall be of uniform width, to be determined by the President of the United States, so that when completed, cars can be run from the Missouri river to the Pacific coast; the grades and curves shall not exceed the maximum grades and curves of the Baltimore and Ohio Railroad; the whole line of said railroad and branches and telegraph shall be operated and used for all purposes of communication, travel, and transportation, so far as the public and government are concerned, as one connected continuous line; . . .

[SEC. 13. *Provided* that the Hannibal and St. Joseph Railroad Company might extend its road from St. Joseph via Atchison to connect with the Kansas line upon the same terms as were given to the Union Pacific; or, if desirable, it might connect instead with the line westward from Omaha, but in this case its subsidy was to cover only the one hundred miles lying next to the Missouri River. The Leavenworth, Pawnee and Western also was authorized to build from Leavenworth a line which should unite it with the line from Kansas City.]

SEC. 14. *And be it further enacted*, That the said Union Pacific Railroad Company is hereby authorized and required to construct a single line of railroad and telegraph from a point on the western boundary of the State of Iowa, to be fixed by the President of the United States, upon the most direct and practicable route, to be subject to his approval, so as to form a connection with the lines of said company at some point on the one-hundredth meridian of longitude aforesaid, from the point of commencement on the western boundary of the State of Iowa, upon the same terms and conditions, in all respects, as are contained in this act for the construction of the said railroad and telegraph first mentioned; and the said Union Pacific Railroad Company shall complete the one hundred miles of road and telegraph in this section provided for, in two years after filing their assent to the conditions of this act, as by the terms of this act required, and at the rate of one hundred miles per year thereafter, until the whole is completed: *Provided*, That a failure upon the part of said company to make said connection in the time aforesaid,

and to perform the obligations imposed on said company by this section and to operate said road in the same manner as the main line shall be operated, shall forfeit to the Government of the United States all the rights, privileges, and franchises granted to and conferred upon said company by this act. And whenever there shall be a line of railroad completed through Minnesota or Iowa to Sioux City, then the said Pacific Railroad Company is hereby authorized and required to construct a railroad and telegraph from said Sioux City upon the most direct and practicable route to a point on, and so as to connect with, the branch railroad and telegraph in this section hereinbefore mentioned, or with the said Union Pacific Railroad, said point of junction to be fixed by the President of the United States, not further west than the one-hundredth meridian of longitude aforesaid, and on the same terms and conditions as provided in this act for the construction of the Union Pacific Railroad as aforesaid, and to complete the same at the rate of one hundred miles per year; and should said company fail to comply with the requirements of this act in relation to the said Sioux City railroad and telegraph, the said company shall suffer the same forfeiture prescribed in relation to the Iowa branch railroad and telegraph hereinbefore mentioned.¹

SEC. 16. *And be it further enacted*, That at any time after the passage of this act all the railroad companies named herein, and assenting hereto, or any two or more of them are authorized to form themselves into one consolidated company; notice of such consolidation, in writing, shall be filed in the Department of the Interior, and such consolidated company shall thereafter proceed to construct said railroad and branches and telegraph line upon the terms and conditions provided in this act.

SEC 17. *And be it further enacted*, That in case said company or companies shall fail to comply with the terms and conditions of this act, by not completing said railroad and telegraph and branches within a reasonable time, or by not keeping the same in repair and use, but shall permit the same, for an unreasonable time, to remain unfinished or out of repair, and unfit for use, Congress may pass any act to insure the speedy completion of said road and branches, or put the same in repair and use, and may direct the income of said railroad and telegraph line to be thereafter devoted to the use of the United States, to repay all such expenditures caused by the default and neglect of such company or companies: *Provided*, That if said roads are not completed so as to form a continuous line of railroad, ready for use, from the Missouri river to the navigable waters of the Sacramento river in California, by the first day of July, eighteen hundred and seventy-six,² the whole of all said railroads before mentioned and to be constructed under the provisions

¹ Amended by sec. 17 of the Act of 1864. See page 114 below.

² Amended by sec. 5 of the Act of 1864. See page 111 below.

of this act, together with all their furniture, fixtures, rolling stock, machine shops, lands, tenements, and hereditaments, and property of every kind and character, shall be forfeited to and be taken possession of by the United States: *Provided*,¹ That of the bonds of the United States in this act provided to be delivered for any and all parts of the roads to be constructed east of the one-hundredth meridian of longitude west from Greenwich, and for any part of the road west of the west foot of the Sierra Nevada mountains, there shall be reserved of each part and installment twenty-five per centum, to be and remain in the United States Treasury, undelivered, until said road and all parts thereof provided for in that act are entirely completed, and of all the bonds provided to be delivered for the said road, between the two points aforesaid, there shall be reserved out of each installment fifteen per centum, to be and remain in the Treasury until the whole of the road provided for in this act is fully completed; and if the said road or any part thereof shall fail of completion at the time limited therefor in this act, then and in that case, the said part of said bonds so reserved shall be forfeited to the United States.

SEC. 18. *And be it further enacted*, That whenever it appears that the net earnings of the entire road and telegraph, including the amount allowed for services rendered the United States, including repairs, and the furnishing, running, and managing of said road, shall exceed ten per centum upon its cost, exclusive of the five per centum to be paid to the United States, Congress may reduce the rates of fare thereon, if unreasonable in amount, and may fix and establish the same by law. And the better to accomplish the objects of this act, namely, to promote the public interest and welfare by the construction of said railroad and telegraph line, and keeping the same in working order, and to secure to the Government at all times (but particularly in time of war) the use and benefits of the same for postal, military, and other purposes, Congress may, at any time, having due regard for the rights of said companies named herein, add to, alter, amend, or repeal this act.

SEC. 20. *And be it further enacted*, That the corporation hereby created and the roads connected therewith, under the provisions of this act, shall make to the Secretary of the Treasury, an annual report wherein shall be set forth—

First. The names of the stockholders and their places of residence, so far as the same can be ascertained;

Second. The names and residences of the directors, and all other officers of the company;

Third. The amount of stock subscribed, and the amount thereof actually paid in;

Fourth. A description of the lines of road surveyed, of the lines thereof fixed upon for the construction of the road, and the cost of such surveys;

¹ Repealed by sec. 7 of the Act of 1864. See page 111 below.

Fifth. The amount received from passengers on the road ;

Sixth. The amount received for freight thereon ;

Seventh. A statement of the expense of said road and its fixtures ;

Eighth. A statement of the indebtedness of said company, setting forth the various kinds thereof : Which report shall be sworn to by the president of said company, and shall be presented to the Secretary of the Treasury on or before the first day of July in each year.

APPROVED July 1, 1862.

AN ACT to amend an Act entitled "An Act to aid in the construction of a Railroad and Telegraph Line from the Mississippi River to the Pacific Ocean, and to secure to the Government the use of the same for postal, military, and other purposes," approved July first, eighteen hundred and sixty-two.

BE IT ENACTED *by the Senate and House of Representatives of the United States of America in Congress assembled*, That the capital stock of the company entitled the Union Pacific Railroad Company, authorized by the act of which this act is amendatory, shall be in shares of one hundred dollars, instead of one thousand dollars each ; that the number of shares shall be one million, instead of one hundred thousand ; and that the number of shares which any person shall hold to entitle him to serve as a director in said company (except the five directors to be appointed by Government) shall be fifty shares, instead of five shares ; and that every subscriber to said capital stock for each share of one thousand dollars, heretofore subscribed, shall be entitled to a certificate for ten shares of one hundred dollars each ; and that the following words in section first of said act, "which shall be subscribed for and held in not more than two hundred shares by any one person," be, and the same are hereby repealed.

[Section 2 provided that, until the whole capital of one hundred million dollars was subscribed, books for receiving stock subscriptions should be kept open in seven cities which were named ; that the cash payments required on subscriptions should continue the same ; that the stockholders should be assessed on their holdings sums not less than five dollars per share, at intervals not greater than six months, until the full value had been paid in ; that only money should be received in payment ; that the capital stock should not be increased beyond the actual cost of the road.]

[Section 3 reduced the width of the right of way to two hundred feet, and provided elaborate machinery for obtaining possession of private lands needed by the road.]

[Section 4 amended section 3 of the Act of 1862 so that ten sections of land on each side of the track, instead of five, were given for each running mile of

the road, this land lying within twenty, instead of ten, miles of the track. It provided that in the Act of 1862 the term "mineral land" should not be construed to mean coal and iron land. It debarred the road from cutting timber at a greater distance from its tracks than ten miles. It exempted from the provisions of this act and the Act of 1862 all lands located or selected for location under "An act donating lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," approved July 2, 1862.]

[Section 5 extended one year the time for filing maps of the proposed routes and for completing the roads; provided that the Central Pacific company need complete but twenty-five miles of track per year, instead of fifty, and that it be given four years to reach the state line; it provided, further, that one-half, instead of the whole, of the sums earned by the roads by serving the government should be applied on the debt to the Government.]

[Section 6 modified section 4 of the Act of 1862 so as to render it easier to get possession of the subsidies, and provided that the Central Pacific should receive its subsidies on the completion of twenty-mile sections instead of forty-mile sections.]

[Section 7 repealed that part of section 17 of the Act of 1862, which provided for a reservation by the Government of a part of the bond subsidy. It provided further that the failure of any one company fully to comply with the conditions of this act and the Act of 1862, should work no forfeiture for the others.]

SEC. 8. *And be it further enacted*, That for the purpose of facilitating the work on said railroad, and of enabling the said company as early as practicable to commence the grading of said railroad in the region of the mountains, between the eastern base of the Rocky mountains and the western base of the Sierra Nevada mountains, so that the same may be finally completed within the time required by law, it is hereby provided that whenever the chief engineer of the said company, and said commissioners, shall certify that a certain proportion of the work required to prepare the road for the superstructure on any such section of twenty miles is done, (which said certificate shall be duly verified,) the Secretary of the Treasury is hereby authorized and required, upon the delivery of such certificate, to issue to said company a proportion of said bonds, not exceeding two-thirds of the amount of bonds authorized to be issued under the provisions of the act, to aid in the construction of such section of twenty miles, nor in any case exceeding two-thirds of the value of the work done, the remaining one-third to remain until the said section is fully completed and certified by the commissioners appointed by the President, according to the terms and provisions of the said act; and no such bonds shall issue to the Union Pacific Railroad Company for work done west of Salt Lake City under this section, more than three hundred miles in

advance of the completed continuous line of said railroad from the point of beginning on the one-hundredth meridian of longitude.

[SEC. 9 gave authority to each of the companies named in the act to establish ferries or build bridges across the Missouri or other rivers which lie in its course, such bridges to be so built as not to interfere with navigation.]

And provided further, That any company authorized by this act to construct its road and telegraph line from the Missouri river to the initial point aforesaid, may construct its road and telegraph line so as to connect with the Union Pacific railroad at any point westwardly of such initial point, in case such company shall deem such westward connection more practicable or desirable; and in aid of the construction of so much of its road and telegraph line as shall be a departure from the route hereinbefore provided for its road, such company shall be entitled to all the benefits, and be subject to all the conditions and restrictions of this act: *Provided further, however*, That the bonds of the United States shall not be issued to such company for a greater amount than is hereinbefore provided, if the same had united with the Union Pacific railroad on the one-hundredth degree of longitude; nor shall such company be entitled to receive any greater amount of alternate sections of public land than are also herein provided.

SEC. 10. *And be it further enacted*, That section five of said act be so modified and amended that the Union Pacific Railroad Company, the Central Pacific Railroad Company, and any other company authorized to participate in the construction of said road, may, on the completion of each section of said road, as provided in said act and the act to which this act is an amendment, issue their first-mortgage bonds on their respective railroad and telegraph lines to an amount not exceeding the amount of the bonds of the United States, and of even tenor and date, time of maturity, rate and character of interest with the bonds authorized to be issued to said railroad companies respectively. And the lien of the United States bonds shall be subordinate to that of the bonds of any or either of said companies hereby authorized to be issued on their respective roads, property, and equipments, except as to the provisions of the sixth section of the act to which this act is an amendment, relating to the transmission of dispatches and the transportation of mails troops, munitions of war, supplies and public stores for the Government of the United States. And said section is further amended by striking out the word "forty," and inserting in lieu thereof the words "on each and every section of not less than twenty."

[SEC. 11 provided that if any company had issued, or should in future issue, bonds which were a lien prior to the guaranteed bonds, their amount should be deducted from the amount of the government and first-mortgage bonds which that company would otherwise be authorized to issue. It also

provided that no subsidies should be given on roads or parts of roads built before the passage of the Act of 1862.]

[SEC. 12 provided that the Union Pacific, eastern division, should build a branch from the mouth of the Kansas river by way of Leavenworth, or else, within two years, build from Leavenworth to Lawrence; but should receive therefor no bond subsidy.]

And if the Union Pacific Railroad Company shall not be proceeding in good faith to build the said railroad through the Territories when the . . . Union Pacific Railroad Company, eastern division, shall have completed their road to the one-hundredth degree of longitude, then the last-named company may proceed to make said road westward until it meets and connects with the Central Pacific Railroad Company on the same line. And the said railroad from the mouth of Kansas river to the one-hundredth meridian of longitude shall be made by the way of Lawrence and Topeka, or on the bank of the Kansas river opposite said towns: *Provided*, that no bonds shall be issued or land certified by the United States to any person or company, for the construction of any part of the main trunk line of said railroad west of the one-hundredth meridian of longitude and east of the Rocky mountains, until said road shall be completed from or near Omaha, on the Missouri river, to the said one-hundredth meridian of longitude.

[SEC. 13 changed the number of elected directors to fifteen, and of government directors to five. It provided that at least one of the latter must be a member of each standing or special committee, and provided for inspections of the property and reports to the Government by the Government directors.]

[SEC. 14 provided that the next election of directors should be at New York on the first Wednesday in October, 1864, and that subsequent elections should be annual, at the same place.]

SEC. 15. *And be it further enacted*, That the several companies authorized to construct the aforesaid roads are hereby required to operate and use said roads and telegraph for all purposes of communication, travel, and transportation, so far as the public and the Government are concerned, as one continuous line; and in such operation and use, to afford and to secure to each equal advantages and facilities as to rates, time, and transportation, without any discrimination of any kind in favor of the road or business of any or either of said companies, or adverse to the road or business of any or either of the others, and it shall not be lawful for the proprietors of any line of telegraph, authorized by this act, or the act amended by this act, to refuse, or fail to convey for all persons requiring the transmission of news and messages of like character, on pain of forfeiting to the persons injured for each offense, the sum of one hundred dollars, and such other damage as he may have suffered on

account of said refusal or failure, to be sued for and recovered in any court of the United States, or of any State or Territory of competent jurisdiction.

SEC. 16. *And be it further enacted*, That any two or more of the companies authorized to participate in the benefits of this act, are hereby authorized at any time to unite and consolidate their organizations, as the same may or shall be, upon such terms and conditions, and in such manner as they may agree upon, and as shall not be incompatible with this act, or the laws of the State or States in which the roads of such companies may be, and to assume and adopt such corporate name and style as they may agree upon, with a capital stock not to exceed the actual cost of the roads so to be consolidated, and shall file a copy of such consolidation in the Department of the Interior; and thereupon such organization, so formed and consolidated, shall succeed to, possess, and be entitled to receive from the Government of the United States, all and singular the grants, benefits, immunities, guarantees, acts, and things to be done and performed, and be subject to the same terms, conditions, restrictions and requirements which said companies respectively, at the time of such consolidation, are or may be entitled or subject to under this act, in place and substitution of said companies so consolidated respectively. And all other provisions of this act, so far as applicable, relating or in any manner appertaining to the companies so consolidated, or either thereof, shall apply and be of force as to such consolidated organization.

[Section 16 provides further that in case any company fails wholly or in part to build its line within the prescribed time, the consolidated company may build it on the terms originally offered, paying to the defaulting company the value of the work done and materials furnished. But the defaulting company may, at any time before the completion of the work, resume all its rights by paying the consolidated company the value of the work done and materials furnished by it. Any company refusing to enter a consolidation shall have equal rights with the consolidation. It is further provided that should the Central Pacific Railroad Company of California complete their line to the eastern line of the State of California, before the line of the Union Pacific Railroad Company shall have been extended westward so as to meet the line of said first-named company, said first-named company may extend their line of road eastward one hundred and fifty miles on the established route, so as to meet and connect with the line of the Union Pacific road, complying in all respects with the provisions and restrictions of this act as to said Union Pacific road, and upon doing so, shall enjoy all the rights, privileges, and benefits conferred by this act on said Union Pacific Railroad Company.]

[SEC. 17 provided that the branch from Sioux City might be built by a company having a line reaching that point from the east, instead of being built by the Union Pacific Company, as per Section 14 of the Act of 1862.]

The bond subsidy was not to be increased by this change, and the land grant was to be five alternate sections on each side of the track for each running mile. Failure to complete this line within ten years of the passage of this act forfeited the portion already built.]

[SECS. 18, 19, and 20 referred to an extension of the Burlington and Missouri River road westward to a junction with the Union Pacific at some point east of the one-hundredth meridian.]

[SEC. 21 provided that before any lands should be given to the company receiving the grant, that company should pay the cost of surveying, selecting and conveying the same.]

[SEC. 22 reserved to Congress the right to alter, amend, or repeal this act.]

APPROVED July 2, 1864.

APPENDIX II.

TABLE I.

FIGURES RELATING TO THE UNION PACIFIC RAILROAD COMPANY.

(SEE CHART I.)

	Miles Operated	Earnings	Operating Expenses	Taxes	Operating Expenses In- cluding Taxes	Surplus Earnings	Ex- pense Ratio
1869	1038.68						
1870		\$ 7,625,277.11	\$4,575,031.36	\$102,383.48	\$4,677,414.84	\$2,947,862.27	61.34
1871		7,521,682.16	3,310,551.55	284,015.31	3,594,466.86	3,921,115.30	47.87
1872		8,892,605.53	4,597,427.63	203,145.85	4,800,573.48	4,092,032.05	53.98
1873		10,266,103.66	4,752,838.58	222,022.44	4,974,861.02	5,291,242.64	48.46
1874		10,559,880.12	4,599,148.74	255,555.13	4,854,703.87	5,705,176.25	45.97
1875		11,993,832.09	4,710,979.10	271,068.85	4,982,047.95	7,011,784.14	41.54
1876		12,886,858.84	4,961,015.27	307,195.93	5,268,211.20	7,618,647.64	40.88
1877		12,948,477.02	5,283,129.20	286,963.50	5,570,092.70	7,199,782.17	42.88
1878		13,121,272.58	4,989,610.79	386,975.40	5,376,586.19	7,744,686.39	40.98
1879	1042.40	18,040,266.08	7,930,078.79	438,758.17	8,368,836.96	9,671,429.12	46.38

TABLE II.

FIGURES RELATING TO THE UNION PACIFIC RAILWAY COMPANY.

(SEE CHART II.)

	Miles Operated	Earnings	Operating Expenses, not Including Taxes	Taxes	Operating Ex- penses, Including Taxes	Surplus Earnings	Exp. Ratio, Taxes Incl'd
1880	1820.90	\$22,275,655.40	\$10,105,211.54	\$439,907.98	\$10,545,119.52	\$11,730,535.88	47.34
1881	1820.90	24,105,380.41	12,086,331.22	394,011.49	12,480,342.71	11,625,037.70	51.77
1882	1820.90	22,710,327.75	10,239,262.74	487,786.54	10,727,049.28	11,983,278.47	47.23
1883	1820.90	20,915,624.11	9,849,399.70	505,140.80	10,354,540.50	10,356,965.25	50.48
1884	1831.90	17,837,060.88	8,424,925.23	470,226.24	8,895,151.47	8,941,909.41	49.87
1885	1832.45	17,455,031.51	8,560,621.24	489,733.96	9,050,355.20	8,404,676.31	51.85
1886	1832.45	17,806,132.59	9,685,771.12	597,654.45	10,283,425.57	7,552,707.02	57.75
1887	1824.06	19,546,088.62	9,869,615.83	564,585.94	10,434,201.77	9,111,886.85	53.38
1888	1821.43	19,898,816.93	11,112,146.67	667,202.10	11,779,348.77	8,119,468.16	59.20
1889	1821.36	19,775,555.84	10,878,359.78	610,516.43	11,488,876.21	8,286,679.63	58.10
1890	1821.42	20,438,208.36	12,573,820.43	589,628.87	13,163,449.30	7,274,759.06	64.41
1891	1821.86	19,687,738.48	11,290,528.18	550,758.60	11,841,286.78	7,846,451.70	60.15
1892	1821.86	20,361,401.66	11,256,622.86	554,510.58	11,811,133.44	8,550,268.22	58.01
1893	1822.39	17,376,792.11	10,578,267.90	593,807.40	11,172,075.30	6,204,716.81	64.26
1894	1822.39	14,739,436.76	10,107,260.70	317,098.81	10,424,359.51	4,315,077.25	70.72

TABLE III.
RELATING TO THE UNION PACIFIC RAILWAY SYSTEM.

(SEE CHART III.)

	Miles Operated	Earnings	Operating Expenses, not Including Taxes	Taxes	Operating Ex- penses, Including Taxes	Surplus Earnings	Exp. Ratio, Taxes Incl'd
1880	2766.30	\$25,066,893.77	\$11,581,693.91	\$ 540,245.75	\$12,121,939.66	\$12,944,954.11	48.36
1881	3125.45	28,971,250.27	15,277,634.82	562,445.19	15,840,080.01	13,131,170.26	54.67
1882	3632.69	29,430,318.70	14,532,384.94	709,576.44	15,241,961.38	14,188,357.32	51.79
1883	4120.65	28,629,222.80	15,057,684.15	1,086,655.66	16,144,339.81	12,484,882.99	56.39
1884	4420.30	25,657,290.41	14,014,460.40	853,654.80	14,868,115.20	10,789,175.21	57.95
1885	4473.95	25,674,674.75	15,083,175.25	904,058.28	15,987,233.53	9,687,441.22	62.27
1886	4509.20	26,280,185.89	16,359,580.23	1,052,633.54	17,412,413.77	8,867,972.12	66.26
1887	4822.81	28,557,765.69	16,616,761.12	1,050,971.42	17,667,732.54	10,890,033.15	61.87
1888	5041.36	30,195,522.53	18,476,428.04	1,258,459.75	19,734,887.79	10,460,634.74	65.36
1889	7389.55	39,669,600.06	24,516,751.40	1,496,801.25	26,013,552.65	13,656,047.41	65.58
1890	7562.94	43,049,248.36	29,343,961.81	1,467,202.46	30,811,164.27	12,238,084.09	71.57
1891	7668.35	42,699,587.83	27,668,896.35	1,491,385.87	29,160,282.22	13,539,305.61	68.29
1892	7673.59	43,135,098.20	27,216,237.23	1,548,742.17	28,764,979.40	14,370,118.80	66.69
1893	7690.57	36,053,401.68	24,508,884.96	1,548,274.16	26,057,159.12	9,996,242.56	72.27

* Owing to complications brought about by the Receivership, it was found impossible to include in the statements covering the financial operations of the Union Pacific Railway System the figures relating to certain lines which had previously appeared as a part of the system. Since this change in the basis of the accounts destroys their value for comparison with the figures of previous years, no account of the year 1894 is taken in the charts and tables relating to the Union Pacific Railway System. They are easily accessible to any one wishing to examine them in the annual report of the company.

The roads omitted from the accounts of 1894 are the Oregon Short Line & Utah Northern Railway Co.; the Union Pacific, Denver & Gulf Railway Co.; the Union Pacific, Lincoln & Colorado Railway Co.; the St. Joseph & Grand Island Railroad Co.; and the Kansas City & Omaha Railroad Co.

TABLE IV.

CLASSIFICATION OF EARNINGS OF THE UNION PACIFIC RAILWAY COMPANY.

(SEE CHART IV.)

	Passenger	Freight	Mail	Express	Telegraph	Miscellaneous	Total
1880	\$5,405,125.32	\$15,218,507.49	\$539,870.66	\$681,818.02		\$ { 430,333.91	\$22,275,655.40
1881	5,131,571.39	15,559,528.42	567,875.65	696,184.12		646,622.05	24,105,380.41
1882	5,197,730.01	13,905,489.63	632,959.12	748,932.30		728,538.95	22,710,327.75
1883	4,659,116.16	12,939,540.06	652,215.52	705,261.96		630,739.16	20,915,024.11
1884	4,212,597.12	11,660,310.63	603,178.60	655,113.46		705,861.07	17,837,060.88
1885	3,979,890.80	12,070,749.15	584,718.69	514,089.89		305,573.98	17,455,031.51
1886	4,160,673.82	12,230,270.56	587,302.77	471,778.39		356,107.05	17,806,132.59
1887	4,620,113.43	13,436,492.60	629,061.36	528,448.03		331,971.20	19,546,088.62
1888	4,650,535.87	13,740,293.55	630,938.23	482,238.88		394,810.40	19,898,816.93
1889	4,324,582.57	13,509,346.17	622,918.30	471,975.21	\$50,172.59	796,561.00	19,775,555.84
1890	4,224,486.26	14,287,575.67	839,927.15	370,346.20	63,324.78	652,548.30	20,438,208.36
1891	3,687,654.01	13,921,636.43	1,016,754.85	348,907.44	52,493.72	660,292.03	19,687,738.48
1892	3,648,334.76	14,558,396.71	1,041,833.54	316,962.71	52,884.48	742,989.46	20,361,401.66
1893	3,459,943.01	11,780,390.67	1,064,532.61	282,951.45	51,152.41	737,821.96	17,376,792.11
1894	2,436,613.94	10,253,679.70	1,124,732.63	236,161.55	48,658.13	639,590.81	14,739,436.76

TABLE V.

CLASSIFICATION OF EARNINGS OF THE UNION PACIFIC RAILWAY SYSTEM.

(SEE CHART V.)

	Passenger	Freight	Mail	Express	Telegraph	Miscellaneous	Total
1880	\$6,266,235.69						\$25,066,893.77
1881	6,372,958.60	\$18,757,807.54					28,971,250.27
1882	6,828,520.70	18,431,555.05	\$790,361.35	\$893,980.26		\$ { 868,636.03	29,430,318.70
1883	6,307,497.66	18,243,858.08	808,849.72	863,166.54		705,250.01	28,629,222.80
1884	6,070,906.95	17,092,927.39	852,270.80	823,693.46		817,491.81	25,657,290.41
1885	5,755,441.68	18,004,247.05	812,612.96	661,516.53		440,856.53	25,674,674.75
1886	6,029,733.83	18,344,549.17	816,351.07	657,364.90		432,186.92	26,280,185.89
1887	6,595,779.54	19,956,467.00	879,296.41	714,055.36		412,167.38	28,557,765.69
1888	6,997,706.99	21,077,346.20	921,841.56	659,608.28		539,019.50	30,195,522.53
1889	8,590,324.86	28,051,716.89	1,080,883.77	756,970.48	\$84,110.74	1,105,593.32	39,669,600.06
1890	9,336,575.58	30,330,900.11	1,529,202.75	692,770.39	106,309.97	1,053,489.54	43,049,248.36
1891	8,484,226.68	30,550,555.29	1,758,249.83	674,517.00	96,952.57	1,135,086.46	42,699,587.83
1892	8,439,623.61	31,051,237.60	1,789,395.49	650,255.74	99,324.56	1,105,261.20	43,135,098.20
1893	7,286,617.13	25,168,689.78	1,815,772.63	573,336.55	93,230.90	1,115,754.69	36,053,401.68

¹ Includes telegraph.

TABLE VI.

FIGURES RELATING TO THE UNION PACIFIC RAILWAY COMPANY'S FREIGHT BUSINESS.

(SEE CHART VI.)

	Total Tons carried x Mile	Rate, Cents per Ton-Mile	Revenue
1880			\$15,218,507.49
1881	783,331,084	1.98 ¹	15,559,528.42
1882	732,791,054	1.89 ¹	13,905,489.63
1883	745,989,015	1.73 ¹	12,939,540.06
1884	797,182,908	1.51 ¹	11,660,310.63
1885	851,807,292	1.49	12,070,749.15
1886	966,233,577	1.443—	12,230,270.56
1887	1,107,931,910	1.276—	13,436,492.60
1888	1,216,056,130	1.173+	13,740,293.55
1889	1,159,338,019	1.165	13,509,346.17
1890	1,248,727,130	1.144	14,287,575.67
1891	1,274,102,581	1.093	13,921,636.43
1892	1,376,906,851	1.057	14,558,396.71
1893	1,199,214,386	.982	11,780,390.67
1894	1,042,493,192	.984	10,253,679.70

TABLE VII.

FIGURES RELATING TO THE UNION PACIFIC RAILWAY SYSTEM'S FREIGHT BUSINESS.

(SEE CHART VII.)

	Total Tons carried x Mile	Rate, Cents per Ton-Mile	Revenue
1880			
1881	839,488,339	2.23 ¹	\$18,757,807.54
1882	833,381,193	2.21 ¹	18,431,555.05
1883	890,741,196	2.05 ¹	18,243,858.08
1884	984,871,475	1.80 ¹	17,092,927.39
1885	1,109,582,402	1.72 ¹	18,004,247.05
1886	1,261,308,798	1.581+ ¹	18,344,549.17
1887	1,490,004,636	1.422+	19,956,467.00
1888	1,682,853,857	1.305—	21,077,346.20
1889	2,057,141,359	1.363+	28,051,716.89
1890	2,330,147,013	1.381	30,330,900.11
1891	2,414,693,606	1.334	30,550,555.29
1892	2,494,050,611	1.316	31,051,237.60
1893	2,194,160,485	1.214	25,168,689.78

¹ Includes coal, but excludes company freight.

TABLE VIII.

FIGURES RELATING TO THE UNION PACIFIC RAILWAY COMPANY'S PASSENGER BUSINESS.

(SEE CHART VIII.)

	Total No. Passengers carried : Mile	Rate	Revenue
1881	153,570,005	3.3400	\$5,131,571.39
1882	157,527,336	3.2900	5,197,730.01
1883	148,963,839	3.1210	4,659,116.16
1884	142,692,631	2.9034	4,212,597.12
1885	144,800,547	2.7485	3,979,899.80
1886	194,870,072	2.1351	4,160,673.82
1887	200,810,375	2.3007	4,620,113.43
1888	207,710,322	2.2389	4,650,535.87
1889	201,741,801	2.1440	4,324,582.57
1890	204,610,983	2.0650	4,224,486.26
1891	171,727,025	2.1470	3,687,654.01
1892	178,983,285	2.0380	3,648,334.76
1893	177,252,384	1.9520	3,459,943.01
1894	130,636,277	1.8650	2,436,613.94

TABLE IX.

FIGURES RELATING TO THE UNION PACIFIC RAILWAY SYSTEM'S PASSENGER BUSINESS.

(SEE CHART IX.)

	Total No. Passengers carried : Mile	Rate	Revenue
1880	165,645,281	3.7835	\$6,266,235.69
1881	177,143,418	3.6000	6,372,958.60
1882	191,756,937	3.5610	6,828,520.70
1883	184,180,603	3.4250	6,307,497.66
1884	185,721,745	3.2690	6,070,906.95
1885	189,071,991	3.0580	5,755,441.68
1886	247,341,275	2.1350	6,029,733.83
1887	278,381,266	2.3010	6,595,779.54
1888	286,820,182	2.4400	6,997,706.99
1889	355,822,732	2.4140	8,590,324.86
1890	399,664,486	2.3360	9,336,575.58
1891	342,481,860	2.4770	8,484,226.68
1892	351,909,299	2.3980	8,439,623.61
1893	317,631,548	2.2940	7,286,617.13

TABLE X.

FIGURES RELATING TO UNION PACIFIC RAILROAD COMPANY'S LAND SALES.

(SEE CHART X.)

	Price	No. Purchasers	Ave. No. A. to Each	Total Net Acreage	Total Proceeds	Expenses	Net Proceeds
To Jan. 1, 1875	\$4.47	....	.....	1,082,893.36	.....	.....	.....
1875	3.66	....	.....	111,049.55	\$ 404,462.00	.....	.....
1876	2.98 ¹ / ₄	....	.....	125,905.21	375,540.82	.....	.....
1877	4.98	....	.....	69,015.87	343,768.02	.....	.....
1878	4.88 ¹ / ₄	....	.....	318,903.47	1,557,082.32	.....	.....
1879	4.14 ¹ / ₄	....	.....	243,337.31	1,007,855.63	.....	.....
1880	4.824	1,922	91.68	143,483.45	882,656.22	\$213,309.48	\$669,346.74
1881	4.938	1,075	89.36	62,406.09	571,807.04	214,893.40	356,913.64
1882	4.28	2,406	121.43	195,248.32	1,155,694.81	245,010.92	910,683.89
1883	3.11	2,606	303.03	805,833.54	2,759,130.64	232,763.86	2,526,366.78
1884	1.52	1,517	263.60	4,321,042.98	6,944,757.17	345,630.33	6,599,126.84
1885	1.65	392	1903.00	743,704.18	1,915,963.47	95,307.67	1,820,655.80
1886	1.22	26	5634.62	146,189.22	996,413.96	65,122.23	931,291.73
1887	1.44	125	410.82	43,297.90	752,591.43	9,541.04	743,050.39
1888	3.91	77	240.33	¹ 17,225.56	619,651.00	3,020.52	616,630.48
1889	2.20	144	728.79	37,987.56	573,453.29	1,037,647.69	² 464,194.40
1890	1.72	151	1084.91	52,001.14	472,315.80	281,095.11	191,220.69
1891	1.83	141	667.82	61,074.52	346,504.07	61,068.31	285,435.76
1892	2.50	164	999.62	¹ 310,739.44	² 9,992.64	73,750.79	² 83,743.43
1893	2.88	133	666.60	¹ 14,535.50	185,452.35	19,451.02	166,001.33
1894	2.31	57	426.98	¹ 32,382.22	59,926.54	157,585.65	² 97,659.11

TABLE XI.

TABLE RELATING TO KANSAS PACIFIC LAND SALES.

(SEE CHART XI.)

	Price	No. Purchasers	Average No. A. to Each	Total Net Acreage	Total Proceeds	Expenses	Net Proceeds
1880	\$4.031	621	161.65	75,187.68	\$410,422.51	\$142,005.19	\$ 268,417.32
1881	4.282	457	217.68	76,980.86	445,958.00	132,945.39	313,012.61
1882	4.93	656	161.46	63,647.55	469,923.51	148,032.65	321,890.86
1883	4.415	1,208	247.00	218,885.71	1,135,752.47	187,338.82	948,413.65
1884	4.215	1,396	234.00	452,566.03	2,076,579.21	245,029.44	1,831,549.77
1885	4.08	1,740	231.00	690,294.91	3,070,831.81	458,575.47	2,612,256.34
1886	4.68	644	357.74	225,623.21	1,341,348.09	83,699.76	1,257,648.33
1887	4.93	2,017	259.05	511,169.77	2,798,605.26	160,964.83	2,637,640.43
1888	5.59	516	298.10	121,596.52	994,703.59	217,184.79	777,518.80
1889	4.94	251	279.79	59,728.49	575,265.54	257,502.21	317,763.33
1890	7.17	130	221.26	17,449.79	372,905.71	262,989.44	109,916.27
1891	6.64	112	191.00	2,420.83 ¹	384,166.03	251,718.05	132,477.98
1892	6.37	314	184.42	10,654.03 ¹	220,083.91	241,680.46	21,596.55 ²
1893	5.52	216	262.46	7,680.42 ¹	142,331.13	186,464.16	44,133.03 ²
1894	7.63	64	122.38	4,033.81	95,179.30	155,840.43	60,661.13 ²

¹ Excess of cancellations over sales.² Deficit.

TABLE XII.

FIGURES RELATING TO UNION PACIFIC RAILROAD COMPANY'S COAL BUSINESS.

(SEE CHART XII.)

	Tons Mined	Cost Per Ton	Price Per Ton	Profit Per Ton	Net Earnings Coal Department
1875	208,222	\$1.88			
1876	264,771	1.41 $\frac{1}{2}$			
1877	275,480	1.13 $\frac{1}{2}$			
1878	275,795	1.04 $\frac{1}{2}$			
1879	340,152	1.06 $\frac{1}{2}$			
1880	445,129	1.76	\$1.69	\$.07 ¹	\$5,978.24 ²
1881	587,493	1.69 $\frac{1}{2}$	1.71 $\frac{1}{2}$	.01 $\frac{1}{2}$	59,045.07
1882	738,210	1.64 $\frac{1}{2}$	1.59 $\frac{1}{2}$	.05 $\frac{1}{2}$ ¹	33,402.65 ²
1883	776,559	1.41 $\frac{1}{2}$	1.53 $\frac{1}{2}$	.11 $\frac{1}{2}$	170,332.44
1884	882,608	1.31 $\frac{1}{2}$	1.46 $\frac{1}{2}$	.14 $\frac{1}{2}$	198,592.13
1885	817,114	1.38	1.51	.13	106,555.02
1886	784,587	1.48	1.60 $\frac{1}{2}$	.12 $\frac{1}{2}$	96,010.35
1887	1,009,249	1.14 $\frac{1}{2}$	1.36 $\frac{1}{2}$	.22 $\frac{1}{2}$	226,451.84
1888	1,134,382	1.18 $\frac{1}{2}$	1.33 $\frac{1}{2}$	.14 $\frac{1}{2}$	166,419.66
1889	1,050,074	1.59 $\frac{1}{2}$	1.54 $\frac{1}{2}$	.04 $\frac{1}{2}$ ¹	47,923.62 ²
1890	1,268,118	1.44 $\frac{1}{2}$	1.45 $\frac{1}{2}$	.00 $\frac{1}{2}$	75,434.16
1891	1,535,045	1.17 $\frac{1}{2}$	1.35 $\frac{1}{2}$	.18 $\frac{1}{2}$	340,758.13
1892	1,651,897	1.09 $\frac{1}{2}$	1.29 $\frac{1}{2}$	.20 $\frac{1}{2}$	422,906.01
1893	1,505,861	1.13 $\frac{1}{2}$	1.35 $\frac{1}{2}$.21 $\frac{1}{2}$	413,090.01
1894	1,299,008	1.05 $\frac{1}{2}$	1.31 $\frac{1}{2}$.26	421,195.02

¹ Loss. ² Deficit.

WAY COMPANY.

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TABLE XIV.

CLASSIFICATION OF EARNINGS OF THE UNION PACIFIC RAILROAD COMPANY.

	Passenger	Freight	Mail	Express	Miscellaneous
1870	\$3,818,627.55	\$3,058,514.71	\$274,513.58	\$281,691.76	\$191,929.53
1871	4,123,510.08	3,629,488.94	283,748.80	307,731.32	177,203.02
1872	3,370,312.41	4,768,419.07	283,855.00	336,333.35	133,685.70
1873	3,887,204.48	5,516,907.58	283,855.00	410,190.76	167,945.84
1874	3,952,858.55	5,664,731.33	345,758.00	381,303.77	215,228.47
1875	4,346,014.34	6,641,512.27	325,143.00	444,174.23	236,988.25
1876	4,307,602.53	7,304,123.50	574,139.00	502,738.42	198,255.39
1877	3,599,756.87	7,597,680.53	596,775.00	430,791.98	248,199.48
1878	3,190,369.72	8,500,955.76	596,775.00	491,145.79	342,026.31
1879	3,207,909.92	8,692,414.24	596,775.00	360,840.90	343,137.60

TABLE XV.

EARNINGS AND EXPENSES OF THE UNION PACIFIC RAILROAD COMPANY.

EARNINGS.	1878	1879	1880
Passengers—Cash.....	\$ 2,926,543.73	\$ 4,236,869.71	\$ 5,171,114.97
Passengers—Government.....	223,865.11	169,927.63	234,010.35
Freight—Cash.....	7,200,556.52	10,572,805.11	13,406,910.18
Freight—Government.....	294,414.10	443,435.46	469,025.04
Freight—Company.....	800,907.27	1,051,154.69	1,342,572.27
Mail.....	596,775.00	685,712.70	719,349.84
Express.....	488,645.92	496,218.28	681,818.02
Miscellaneous.....	589,564.93	384,142.50	430,331.91
Total.....	\$13,121,272.58	\$18,040,226.08	\$22,455,134.58
EXPENSES.			
Conducting Transportation.....	\$ 912,161.57	\$1,555,833.38	\$ 2,132,692.47
Motive Power.....	1,693,721.54	2,706,055.53	3,583,453.72
Maintenance of Cars.....	443,760.66	639,091.10	841,417.08
Maintenance of Way.....	1,513,005.48	1,701,535.55	1,964,772.72
Renewal of Rails.....		816,853.62	1,109,676.57
General Expenses.....	607,537.40	910,709.61	473,198.98
Taxes.....	206,399.54	438,758.17	439,907.98
Total.....	5,475,503.44	8,368,836.96	10,545,119.52
Surplus Earnings.....	\$7,744,686.39	\$9,671,429.12	\$11,910,015.06
Expenses, ratio per cent.....	40.98	46.38	46.96

TABLE XVI.

EARNINGS AND EXPENSES OF THE UNION PACIFIC RAILROAD COMPANY.

EARNINGS.	1870	1871	1872	1873	1874	1875	1876	1877
Commercial Passenger.....	\$3,528,857.68	\$2,895,606.38	\$3,067,158.29	\$3,639,086.60	\$3,702,155.79	\$4,169,770.69	\$4,083,987.75	\$3,306,505.62
Government Passenger.....	289,769.92	227,903.70	303,154.12	248,117.88	250,702.76	176,243.65	223,614.78	293,251.25
Commercial Freight.....	2,360,292.69	3,062,968.35	4,166,993.76	4,806,620.85	4,819,661.00	5,758,479.02	6,219,496.60	6,458,514.85
Government Freight.....	263,219.95	213,585.15	170,158.06	219,939.65	316,840.21	234,596.13	374,387.65	362,208.21
Company Freight.....	435,002.55	352,935.44	431,267.25	490,347.08	528,230.12	648,437.12	710,239.25	776,957.47
United States Mail.....	242,513.56	283,748.80	283,855.00	283,855.00	345,758.00	325,143.00	574,139.00	596,775.00
Express.....	281,691.76	307,731.32	336,333.35	410,190.76	381,393.77	444,174.23	502,738.42	430,791.98
Car Service.....	62,913.49	57,459.13	3,959.36	16,281.73	25,308.83	32,551.97	22,043.74	31,201.38
Miscellaneous.....	108,288.32	103,934.38	112,612.80	135,392.51	222,298.41	179,597.21	195,972.60	257,221.33
Rents.....	20,727.19	15,809.51	17,113.54	16,271.60	18,238.89	24,839.07	24,326.53	22,179.53
Bridge.....	.....	.....	.....	.....	.....	.....	.....	475,273.16
Total.....	\$7,625,277.11	\$7,521,682.16	\$8,892,605.53	\$10,266,103.66	\$10,559,880.12	\$11,993,832.09	\$12,886,858.84	\$12,948,477.02
OPERATING EXPENSES.								
Conducting Transportation.....	\$773,377.90	\$667,815.91	\$753,456.87	\$772,439.51	\$745,470.24	\$820,759.98	\$831,182.92	\$874,999.61
Motive Power, Water Expenses, etc.....	634,264.13	500,045.07	611,058.34	622,926.43	540,084.19	614,603.62	625,868.36	611,890.43
Fuel for Locomotives.....	515,112.99	536,942.74	746,357.73	747,196.71	638,931.99	698,134.43	742,869.37	650,594.80
Repairs of Locomotives.....	490,892.41	214,987.96	390,471.73	347,352.53	336,333.69	377,560.57	428,061.79	399,904.40
Repairs of Passenger Cars.....	188,917.67	105,023.14	135,778.48	135,074.27	122,595.86	93,681.01	118,352.97	142,869.02
Repairs of Freight Cars.....	306,672.75	178,163.16	198,711.58	259,831.53	266,085.68	241,441.24	287,654.28	295,879.41
Repairs of Shops, Sheds, etc.....	64,224.98	29,687.76	37,682.56	29,380.33	26,084.64	31,864.99	26,713.19	27,439.56
Renewal of Rails.....	.....	6,927.53	253,318.83	277,738.19	467,914.67	347,465.71	495,158.01	573,558.46
Renewal of Ties.....	187,541.34	170,067.00	171,940.40	364,101.08	295,457.46	322,154.53	291,024.23	317,669.02
Maintenance of Track.....	1,002,125.10	645,200.50	773,579.05	885,229.51	883,124.70	761,681.98	709,613.69	674,344.59
Removal of Snow and Ice.....	36,976.01	66,289.03	196,235.89	34,129.27	10,188.13	42,498.72	68,373.32	8,382.78
Repairs of Snow Sheds and Fences.....	33,451.83	14,326.47	103,033.50	35,757.45	13,623.59	22,949.62	25,682.46	20,749.96
Repairs of Bridges.....	83,153.05	67,280.22	77,421.12	99,423.46	81,808.04	182,589.64	112,327.00	81,000.94
General Expenses.....	258,321.20	116,785.06	148,381.55	142,258.31	171,475.86	153,653.06	108,133.68	307,175.21
Taxes.....	102,383.48	284,015.31	203,145.85	222,022.44	255,555.13	271,068.85	307,195.93	286,963.50
Total.....	\$4,677,414.84	\$3,600,566.86	\$4,800,573.48	\$4,974,861.02	\$4,854,703.87	\$4,982,047.95	\$5,268,211.20	\$5,273,421.69
Surplus Earnings.....	2,947,862.27	3,921,115.30	4,092,032.05	5,291,242.64	5,705,176.25	7,011,784.14	7,618,647.64	7,199,782.17
Expense Ratio.....	61.34	47.87	53.98	48.46	45.97	41.54	40.88	42.28

* Amount expended in excess of receipts for car service.



TABLE XVI.

EARNINGS AND EXPENSES OF THE UNION PACIFIC RAILROAD COMPANY.

EARNINGS.	1870	1871	1872	1873	1874	1875	1876	1877
Commercial Passenger.....	\$3,528,857.68	\$2,895,606.38	\$3,067,158.29	\$3,639,086.60	\$3,702,155.79	\$4,169,770.69	\$4,083,987.75	\$3,306,505.62
Government Passenger.....	289,769.92	227,993.70	303,154.12	248,117.88	350,702.76	176,243.65	223,614.78	293,251.25
Commercial Freight.....	2,360,292.69	3,062,968.35	4,166,993.76	4,866,620.85	4,819,661.00	5,758,479.02	6,219,496.60	6,458,514.85
Government Freight.....	263,219.95	213,585.15	170,158.06	219,939.65	316,840.21	234,596.13	374,387.65	362,208.21
Company Freight.....	435,002.55	352,935.44	431,267.25	490,347.08	528,230.12	648,437.12	710,239.25	776,957.47
United States Mail.....	242,513.56	283,748.80	283,855.00	345,758.00	345,758.00	325,143.00	574,139.00	596,775.00
Express.....	281,691.76	307,731.32	336,333.35	410,190.76	381,303.77	444,174.23	502,738.42	430,791.98
Car Service.....	62,913.49	57,459.13	3,959.36	16,281.73	25,308.83	32,551.97	22,043.74	31,201.38
Miscellaneous.....	108,288.32	103,934.38	112,612.80	135,392.51	222,298.41	179,597.21	195,972.60	257,221.33
Rents.....	20,727.19	15,809.51	17,113.54	16,271.60	18,238.89	24,839.07	24,326.53	22,179.53
Bridge.....	.....	.....	.....	.....	.....	.....	.....	475,273.16
Total.....	\$7,625,277.11	\$7,521,682.16	\$8,892,605.53	\$10,266,103.66	\$10,559,880.12	\$11,993,832.09	\$12,886,858.84	\$12,948,477.02
OPERATING EXPENSES.								
Conducting Transportation.....	\$773,377.90	\$667,815.91	\$753,456.87	\$772,439.51	\$745,470.24	\$820,759.98	\$831,182.92	\$874,999.61
Motive Power, Water Expenses, etc.....	634,264.13	500,045.07	611,058.34	622,926.43	540,084.19	614,603.62	625,868.36	611,890.43
Fuel for Locomotives.....	515,112.99	536,942.74	746,357.73	747,196.71	638,931.99	698,134.43	742,869.37	650,594.80
Repairs of Locomotives.....	490,892.41	214,987.96	390,471.73	347,352.53	336,333.69	377,560.57	428,061.79	399,904.40
Repairs of Passenger Cars.....	188,917.67	105,023.14	135,778.48	135,074.27	122,595.86	93,581.01	118,352.97	142,869.02
Repairs of Freight Cars.....	306,672.75	178,163.16	198,711.58	259,831.53	266,085.68	241,441.24	287,654.28	295,879.41
Repairs of Shops, Sheds, etc.....	64,224.98	29,687.76	37,682.56	29,380.33	26,084.64	31,804.99	26,713.19	27,439.56
Renewal of Rails.....	.....	6,927.53	253,318.83	277,738.19	467,914.67	347,465.71	495,158.01	573,558.46
Renewal of Ties.....	187,541.34	170,067.00	171,940.40	364,101.08	295,457.46	322,154.53	201,024.23	317,669.02
Maintenance of Track.....	1,002,125.10	645,200.50	773,579.05	885,229.51	883,124.70	761,081.98	709,613.09	674,344.59
Removal of Snow and Ice.....	36,976.01	60,289.03	196,235.89	34,129.27	10,188.13	42,498.72	68,373.32	8,382.78
Repairs of Snow Sheds and Fences.....	33,451.83	14,336.47	103,933.50	35,757.45	13,623.59	22,049.62	25,682.46	20,749.96
Repairs of Bridges.....	83,153.05	67,280.22	77,421.12	99,423.40	81,808.04	182,589.64	112,327.00	81,000.94
General Expenses.....	258,321.20	119,785.06	148,381.55	142,258.31	171,475.86	153,053.06	198,133.68	307,175.21
Taxes.....	102,383.48	284,015.31	203,145.85	222,022.44	255,555.13	271,068.85	307,195.93	286,963.50
Total.....	\$4,677,414.84	\$3,600,566.86	\$4,800,573.48	\$4,974,861.02	\$4,854,703.87	\$4,982,047.95	\$5,268,211.20	\$5,273,421.69
Surplus Earnings.....	2,947,862.27	3,921,115.30	4,092,032.05	5,291,242.64	5,705,176.25	7,011,784.14	7,618,647.64	7,199,782.17
Expense Ratio.....	61.34	47.87	53.98	48.46	45.97	41.54	40.88	42.28

* Amount expended in excess of receipts for car service.

1889
3,693,630.26
3,785,997.21
1,350,092.05
1,512,885.74
134,160.80
401,593.72
10,878,359.78
8,897,196.06
610,516.42
8,286,679.62
\$1,821.30
58.10
55.0

1889
7,876,075.21
8,688,618.80
2,357,295.80
4,552,778.21
243,541.50
798,441.5
24,516,751.41
15,152,848.60
1,496,801.2
13,656,047.4
\$7,389.5
65.5
61.8

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